THE

AMERICAN MEDICAL TIMES

Being a Weekly Series of the New York Journal of Medicine

EDITED BY

STEPHEN SMITH, M.D.

ASSOCIATE EDITOR,

GEO. F. SHRADY, M.D.

VOL. IV.

JANUARY TO JULY, 1862.

NEW YORK:
BAILLIERE BROTHERS, 440 BROADWAY.

LONDON:
H. BAILLIERE,
219 REGENT ST.

MELBOURNE:
F. BAILLIERE.

PARIS:
J. B. BAILLIERE ET FILS,
RUE HAUTEFEUILLE.

MADRID:
B. BAILLY-BAILLIERE,
CALLE DEL PRINCIPE.

1862.

Entered, according to Act of Congress, in the year 1862, by
BAILLIERE BROTHERS,
In the Clerk's Office of the District Court of the United States for the Southern District of New York.

R. CRAIGHEAD,
Printer, Stereotyper, and Electrotyper,
Caxton Building,
81, 83, and 85 Centre Street.

CONTRIBUTORS TO THE FOURTH VOLUME.

ARNOLD, Edmund, M.D., of Yonkers, N. Y.

BARKER, B. Fordyce, M.D., Prof. of Obstetrics in Bellevue Hospital Medical College, N. Y., etc.
BAUER, L., M.D., Brooklyn, N. Y.
BENNET, E. P., M.D., Bridgeport, Conn.
BIGHAM, J. G., M.D., Millersburg, Ohio.
BLY, Douglas, M.D., Rochester, N. Y.
BRADFORD, J. T., M.D., U. S. A., Ky.
BRIDDON, C. K., M.D., Surgeon N. Y. Dispensary, N. Y.
BUCK, Gurdon, M.D., Surgeon to New York Hospital, etc.
BULKLEY, H. D., M.D., Physician to the New York Hospital, N. Y.
BUMSTEAD, Freeman J., M.D., Surgeon New York Eye Infirmary, N. Y., etc.
BYRNE, Dr. J., Brooklyn, N. Y.

CAMPBELL, J. L., M.D., N. Y.
CHAPIN, J. B., M.D., Canandaigua, N. Y.
CLARK, Alonzo, M.D., Prof. of Pathology and Practice of Medicine in the College of Physicians and Surgeons, N. Y.
COOPER, E. S., M.D., Professor of Anatomy and Surgery in the Medical Department of the University of the Pacific, San Francisco, Cal.

DESLANDES, P. F. C., M.D., of New York.
DETMOLD, W., M.D., of New York.
DONAGHE, W. R., M.D., of New York.

ECHEVERRIA, M. Gonzalez, M.D., late Assistant Physician to the National Hospital for the Paralysed and Epileptics of London, of New York.
ELLIOT, George T., M.D., Professor of Obstetrics in the Bellevue Hospital Medical College, N. Y.

FINNELL, T. C., M.D., of New York.
FLINT, Austin, M.D., Professor of Principles and Practice of Medicine in the Bellevue Hospital Medical College, New York.

GARDNER, A. K., M.D., of N. Y.
GILFILLAN, Wm., M.D., Surgeon to the Long Island College Hospital, Brooklyn, N. Y.
GILMAN, C. R., M.D., Professor of Obstetrics and Medical Jurisprudence in the College of Physicians and Surgeons, N. Y.
GREENE, W. W., M.D., of Maine.
GRISCOM, John H., M.D., Physician to the New York Hospital, etc.
GUILD, J. H., M.D., of Rupert, Vermont.

HAMLIN, A. C., M.D., Surgeon Second Regt. Maine Volunteers.
HORR, Asa, M.D., of Dubuque, Iowa.
HUNT, E. M., M.D., of New Jersey.
HUSTED, Dr. N. C., of New York.
HUTCHISON, J. C., M.D., Professor of Operative Surgery and Surgical Anatomy in the Long Island College Hospital, Brooklyn, N. Y.

IRWIN, B. J. D., M.D., Medical Inspector, Army of the Ohio.

JACOBI, A., M.D., Professor of Infantile Pathology and Therapeutics in the New York Medical College and Charity Hospital, N. Y.
JANES, E. H., M.D., of New York.

KIDD, Charles, M. D., of London.
KNEELAND, Jonathan, M.D., of South Onondaga, N. Y.
KRACKOWIZER, E., M.D., of N. Y.

LASSING, H., M.D., of New York.
LEE, C. A., M.D., Professor of Materia Medica, N. Y.
LENT, F. D., M.D., of Cold Spring, N. Y.
LEWIS, Geo., M.D., of Minnesota.
LITTLE, J. L., M.D., House Surgeon to the New York Hospital, New York.
LOOMIS, A. J., M.D., Physician to Bellevue Hospital, N. Y.
LYMAN, F. R., M.D., House Physician, Bellevue Hospital, N. Y.
LYMAN, Henry M., M.D., House-Surgeon to Bellevue Hospital, N. Y.

MARSH, M. M., M.D., of Montpellier, Vermont.
MARTIN, Joseph, M.D., of New York.

NŒGGERATH, E., M.D., of New York.
NOYES, H. D., M.D., Assistant Surgeon New York Eye Infirmary.

O'Meagher, Wm., M.D., of New York.
O'Reilly, John, M.D., of New York.

Parker, Willard, M.D., Professor of the Principles and Practice of Surgery in the College of Physicians and Surgeons, New York.
Parigot, L., M.D., late Commissioner in Lunacy and Chief Physician of the Colony of Gheel, Belgium, etc. etc.; of Sing Sing, N. Y.
Peaslee, E. R., M.D., of New York.
Percy, S. R., M.D., Prof. of Materia Medica and Therapeutics in the New York Medical College and Charity Hospital, New York.
Plympton, H. S., M.D., House Physician, Bellevue Hospital, N. Y.
Post, Alfred C., M.D., Professor of Surgery in the University Medical College, N. Y.

Rochard, Dr. Jules, Surgeon-in-Chief of the French Navy.
Roosa, D. B. St John, M.D., House Surgeon to New York Hospital, N. Y.

Sims, J. Marion, M.D., Surgeon to the Woman's Hospital, New York.
Smith, David P., M.D., of Springfield, Mass.
Smith, Geo. K., M.D. Demonstrator of Anatomy in the Long Island College Hospital.
Smith, J. Lewis, M.D., Curator to the Nursery and Child's Hospital, N. Y.
Segur, B. A., M.D., House Surgeon, Bellevue Hospital, N. Y.
Suckley, G. S., M.D., Medical Inspector U. S. A.
Swan, C. Y., M. D., of New York.

Taylor, I. E., M.D., Professor of Obstetrics in the Bellevue Hospital Medical College, N. Y.
Thompson, J. H., M.D., of New York.

Vedder, J. H., M.D., of Flushing, Long Island.
Voss, L., M.D., of New York.

Wallace, S. C., M.D., Assistant Surgeon Ninety-third Regiment N. Y. S. Volunteers.
Watson, John, M.D., Surgeon to the New York Hospital, New York.
Willson, Geo. B., M.D., of Port Huron, Mich.
Wiswell, S. L., M.D., of Cabot, Vermont.
Wood, Jacob A., M.D., of New York.

Reports from the following Hospitals, Institutions, and Societies, have appeared in this Volume.

Bellevue Hospital, N. Y.
College of Physicians and Surgeons, New York.
Connecticut River Medical Association.
Mill Creek Hospital, Fortress Monroe, Va.
Medical Society of the State of N. Y.
New Jersey State Medical Society, N. J.
New York Academy of Medicine.
New York Eye Infirmary.
New York Hospital.
New York State Volunteer Hospital.
New York Pathological Society.
Nursery and Child's Hospital, New York.
Surgical Section New York Academy of Medicine, N. Y.
U. S. General Hospital, Washington, D. C.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.

By SAMUEL R. PERCY, M.D.,
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE I.

IODIDE OF IRON.

Gentlemen:—It is not known how long iron has been used in medicine, but the Greeks, who had the vanity to claim every good invention or application as their own, seem to have discovered the use of iron in medicine; but they must first procure for it the sanction of some deity; in this instance the deity personated a vulture—a fit emblem of the ravenous propensities of their priest-doctors.

It is said that a shepherd, who professed to be possessed of supernatural powers (a kind of ancient clairvoyant), was appealed to by a young prince for a remedy to relieve him of impotence. This young prince, Iphicles, the son of Philacus, was unable to perform his marital duties. In this state of things the sages were right in inducing him to pay a solitary visit to his uncle. While from home, enjoying the bracing air of the hills, and practising forced abstinence, he met the shepherd Melampus, who for his benefit slaughtered two bulls. The intestines of these two bulls were cut in pieces so as to entice the birds to an augury. Among those which came to the feast of these delicate and savory morsels, was a vulture, which in payment for the feast informed Melampus that the young prince Iphicles had, when a boy, stuck a knife, wet with the blood of some rams, into a consecrated chestnut tree. The bark of the tree had subsequently grown over the knife and inclosed it. The vulture disclosed the place where it was hidden, and directed that the rust should be scraped off, and put into wine; this was to be drunk for ten days (of course under the usual close sacerdotal watchings), in which time he would recover from his impotence, and be capable of begetting children. The advice thus given to young Iphicles was followed with perfect success.

Let us turn to the special consideration of the iodide of iron. Dr. A. T. Thomson of London first brought this substance before the profession in a pamphlet written in 1834, entitled "Observations on the Preparation and Medicinal Employment of the Iodureted and Hydriodate of Iron." But it was used previously by Dr. Parquin in 1824, and by Prof. S. Jackson in 1832.

There are various officinal formulæ for the preparation of this substance, all of which aim to its preparation with the least possible exposure to the air. In preference to any of them, I will give you the one I have been in the habit of using since the autumn of 1838, as it differs a little in the manipulations from those usually employed. This substance is always best when freshly prepared, and it is well, therefore, to make but a small quantity at any one time.

Introduce into a Florence flask ʒ iv. of distilled water, and ʒ vj. of clean iron turnings, and add gradually iodine in quantity of about ʒ j. at a time, until ʒ ij. of iodine have been introduced. A new portion of iodine should not be added until the previous one has entered into combination, for if too much iodine is added, the action is too energetic, great heat is evolved, and vapor of iodine is given off in abundance. After all of the iodine is added, the solution remains for a time of a dark brown color, but by agitation changes to a deep green. It should then be boiled for some minutes, and filtered, while hot, into a clean Florence flask. It is desirable to filter quickly, and partly for this object, and partly to avoid decomposition, I have always used four small iron rods between the funnel and the filtering paper. These rods are suspended in the funnel by being bent at the upper end, and thus are supported by the edge of the funnel. Care is required in pouring the hot solution into the paper filter, lest it be broken. It should be conducted by means of an iron rod upon the upper portion of the filter. After it is all filtered into the clean flask, a rod of iron wire is suspended, by being bent at the extremity, from the top of the flask, but it should be too short to touch the bottom. The solution is now allowed to boil slowly until it begins to assume a dark appearance, when it requires to be constantly agitated. With the wire small portions of it can be frequently tried, on a cold piece of glass, or porcelain, and when it is found to crystallize properly the whole may be poured out upon a clean iron or porcelain slab. As soon as it is cold it should be broken up, and put into closely stoppered bottles. It is in greenish-black tabular crystals, which are very deliquescent in the air, and soon decompose into sesquioxide of iron and free iodine.

By this formula I have prepared large quantities, and with uniform success. The evaporation is not conducted so quickly in a Florence flask as it would be in an iron or porcelain dish, but it is not acted on so much by the air, and this more than compensates for the time lost. Unless I wish to obtain it in thin flat cakes, so as to be easily broken and put in small bottles, I generally allow the evaporation to be perfectly completed, and then permit the salt to cool and crystallize in the flask. The flask is then broken, and the mass put away in large-mouthed stoppered bottles. Where you wish to have a mass of uniform size and appearance, to put in small bottles, and to look well, you had better pour the salt out upon the slab; but if you wish it for use only, and are regardless of uniformity of size and appearance, it is better to allow the cooling and crystallization to take place in the flask. Even by the best processes, it is difficult to obtain this salt perfectly pure, as it so readily unites with oxygen, and by this means becomes contaminated with the sesquioxide of iron. Some endeavor to prevent the change by evaporating the solution in iron dishes, and in a hot air press.

Iodide of iron is a greenish black crystalline substance, of an unpleasant, styptic, and pungent chalybeate taste. It is exceedingly deliquescent, and soon decomposes upon exposure to the air. If exposed to a high temperature, violet-colored fumes of iodine are given off, and sesquioxide of iron is left behind. When recently prepared, it is wholly soluble in both water and alcohol, and the solution at first is of a pale green color, but it soon becomes turbid, growing more so every hour, and a brownish deposit of iron gradually increases in quantity. If the solution is strong, it becomes an orange red, owing to the presence of free iodine. As the iron separates it is at first a protoxide, but it rapidly becomes a sesquioxide from the absorption of oxygen; hydriodic acid is set free, and the solution is found to be acid, but by the action of air and light this soon changes into iodine.

When the iodide of iron was used in solution various plans were adopted to prevent the rapid decomposition, the most frequent of which was the suspension in various ways and forms of iron in the solution; but these were not sufficient to prevent the change. It was very difficult to form it into pills, for the least moisture made them so deliquescent that they became moist, friable, and either softened down into a wet mass, or broke up into small pieces. Besides, when freshly made and administered at once, they were apt to cause derangement and irritability of the stomach.

If administered in the fluid form it had to be made fresh very frequently, and its taste was harsh, styptic, and unpleasant, and it was difficult to administer it to children. Independent also of its easy decomposition by the air, it was most rapidly decomposed by any substance that was incompatible with sulphate of iron; it was also incompatible with the alkalies and their carbonates, and other substances with which physicians wished sometimes to associate it.

The dry salt is composed of

One eq. Iron	28 or 18·2	per cent.
One eq. Iodine . . .	126 or 81·8	"
	154 100·0	

After the introduction of this substance it was used very extensively, and in spite of its many disadvantages it was found to be a most valuable remedy. But as it decomposed so quickly, its administration was both tedious and difficult, and it frequently occasioned, when taken in pills, great irritability of the stomach. All physicians acknowledged its great utility, and expressed the necessity of some means being adopted to make it a stable and unchangeable substance. In the early part of November, 1838, my brother had a patient to whom he was administering this substance in solution. As it so rapidly decomposed I prepared it from the salt, fresh every day, and on one of these occasions, thinking to make an improvement in the taste, I filtered it into a thick syrup. It was brought back, because it differed so much in appearance from any that had been before made. Instead of a muddy solution containing a deposit of sesquioxide of iron, which was constantly increasing in quantity, I found a solution as clear and transparent as when I made it. It was carefully put aside with the cork left out of the bottle until the next day, and was then still found clear, transparent, and unchanged. Here then was the desideratum sought for. But I asked myself the question, why is it not decomposed? It was evident to me that the syrup protected it from oxidation by the atmosphere. Following these deductions I the same day made for the first time the Syrupus Ferri Iodidi from a newly prepared solution of iodine and iron, and filtered while hot directly upon sufficient sugar to make a thick syrup. This sample was shown at once to Professor Torrey, and exhibited by him to his class. From this time it was extensively employed by physicians with whom I was acquainted, and my own preparation was soon used in great quantities, in the New York Eye and Ear Infirmary.

In 1839, Mr. Frederking, of Riga, made the same discovery, and published it in Buckner's *Repertorium;* Wackenroder, and Kerner and others, published articles upon it in the German journals soon after Frederking's first publication. In 1840, Professor Proctor published an able article upon it in the *American Journal of Pharmacy.* M. Dupasquier, of Lyons, claims to have discovered it the same year that I did, 1838, and although neither he nor I published it, we did not keep it secret, but did all we could, through our private influence, to make it known, and to us simultaneously (he in Lyons, I in New York) is due the credit of first preparing it. I can prove my claim to the discovery of this important article, and I have always upheld it, but I have never quarrelled over it; I have but rejoiced that a substance next in importance to iodine itself, is now within the reach and use of all.

SYRUPUS FERRI IODIDI.

Each of the Pharmacopœias has a formula for the preparation of this article; but they all vary in the amount of the iodide contained in a given quantity. I will describe to you the formula by which I first prepared it, and then show you wherein it differs in strength from the U. S. formula.

Into a Florence flask I put about 4 oz. of distilled water, and 1¼ oz. of clean iron turnings. Iodine was then added in small quantities at a time, until 1309 grains (2 oz. 5 drs. 49 grs.) were introduced. When the action between the iodine and iron had ceased, the solution was brought to the boiling point, and maintained at that point for a few minutes. Then, by the same arrangements of the funnel, as described to you a few minutes ago, the fluid was filtered into a bottle containing 2 lbs. (troy) of sugar, and boiling distilled water added until the whole measured 1 quart 10⅔ drachms = 16,000 minims. While filtering was progressing, the bottle, which was a graduated one, and kept for this purpose, stood in boiling water, and it was frequently shaken to dissolve the sugar. A spiral coil of wire reaching from the bottom to the top, was left in the bottle, or into one into which the syrup was transferred. You will, by calculation, observe that every minim of the syrup contained $\frac{1}{16}$th grain of iodide of iron, and that the quantity being in decimals was easily calculated. By my formula there were 6 grains of iodide to f. ʒj.; by the U. S. formula 7¼ grs., and by the British, 5 grains to the f. ʒj. My formula is certainly the most convenient, as the quantity of iodide in any given quantity is so easily calculated by decimals, there being 10 grs. in every 100 minims. The formulæ, in other respects, differ only in the minor manipulations, and in the quantity of sugar employed, which is not large enough in any of them. The name in the U. S. Dispensatory is given as Liquor Ferri Iodidi; this is a change I do not like, and it is not as appropriate as that of Syrup, which is used by the British colleges.

A great deal of the syrup of the iodide of iron that is made, decomposes very quickly, and a layer of more or less thickness and dark color is seen upon the top. This is generally owing to some fault in the preparation, frequently, I think, from not being boiled, or brought near to the boiling temperature, or it may be produced by adding cold water instead of boiling water, to make up the quantity required by measure. Cold water always contains some atmospheric air, which is driven off by boiling. I have had many samples shown to me that were colored and decomposed, which were restored, if boiled with a coil of wire in the syrup; they kept well afterwards. I always stand the bottle for some time in boiling water, or boil the syrup, and it keeps better for so doing.

When freshly made, the syrup has a greenish tinge, but it loses the green color by age. A peculiar change in the color takes place, if a bottle full of it stands in the sun's rays; however closely corked or sealed it may be, it loses its color, becoming white and more transparent. If desirable to give this in pilular form, a syrup of double or four times the strength of that just mentioned, may be made, and may be evaporated down and made into pills, or put into the double gelatine capsules. I know of no adulteration of this article, the only fraud practised is in making it weaker than the officinal strength. This may be detected by decomposing and collecting and weighing both the iodine and the sesquioxide of iron.

Large doses of iodide of iron have been administered to animals, and vomiting and purging have been produced, with congestion of the stomach and almost decomposition of its lining membrane. In small and diluted doses it seemed to act as a tonic.

Therapeutic Uses.—The syrup of the iodide of iron possesses in a marked degree the constitutional effects of both the iodine and the iron, and it presents to the digestive organs a mild and soluble compound of the two metals. Its principal action is as a tonic and alterative. It is more used in the diseases of children than in those of adults. The scrofulous diseases of children, which are always accompanied with an anæmic condition of the system, are more successfully treated with this article than with any other in the Materia Medica. It would be impossible for me in one lecture to describe to you the various forms of scrofulous disease with which children are troubled, but they nearly all depend upon a morbid material existing in the system; a full pathological description of which you will learn elsewhere. The iodide of iron exerts a special action on the blood, by virtue of which it is enabled to counteract the morbid action of scrofula, and to stimulate the functions of absorption to remove the diseased material from the system. Under its proper use the digestion is improved, and the appetite increased; and it acts as a tonic by improving the quality of the blood. It is less astringent than most of the other soluble preparations of iron, and is in large doses quite laxative in its effects. From numerous experiments that have been made, it appears that it suffers

decomposition in the system, the iodine appearing in the urine. Thomson says that, unless it is taken in large doses both metals do not appear in the urine, and that in small doses the iodine is passed off by the kidneys and the iron is retained. Quevenne, from a number of experiments, makes the same observation. These do not agree entirely with my own observations. I have found, that when the syrup is judiciously given in small doses of one to three drops to scrofulous and anæmic children, it can be tolerated for a long time, and will continue to be of great benefit for several weeks, without the necessity of suspending its use for a day. Children with this small dose repeated three or four times a day will improve rapidly and steadily, when they will not do so well if the dose is increased. In the one instance the iron is all taken up in the system, and only passed off in the usual metamorphosis of tissue, and the iodine exerts its peculiar alterative action upon the glandular absorbents, but in the other instance the salt is presented in larger quantities than are required for immediate metamorphoses, and it is passed off to some extent undecomposed and irritates both stomach and kidneys. In proper medicinal doses we seldom find the iron in the urine, the iodine in small quantities will appear there but for a length of time, the iron is all retained in the system, and as the system becomes saturated with it, it is first discovered in the fæces. Iron as a rule, is passed off in the fæces not in the urine. I generally find that in these anæmic cases the iodide does good, so long as the iron is retained in the system and the iodine is liberated, but so soon as the salt appears in the fæces the vegetable tonics will be of more service. The decomposed salt may sometimes be found in the fæces. In these instances the excrements will be colored with protosulphuret of iron, but iodine will be recognised in spots of a blue color, combined with some starchy elements of the food. These blue spots I have occasionally seen quite numerous in the fæces of children recovering from tabes mesenterica. As I have before said, these scrofulous anæmic patients will frequently take the syrup of the iodide of iron for weeks together with great benefit, even in the small doses of two or three drops. If you will examine the fæces of these patients daily they will be found either of a diseased or natural color, but they will show no trace of iron, but by degrees slight discolorations of iron will be seen, and as the medicine is continued the whole mass of fæces is stained of a bluish black color, indicating the presence of iron through the whole mass. The iron as here found is a protosulphuret (FeS). If large doses are administered this will be seen quite early, but the color is in streaks, not uniform throughout the whole. When then I find that with minute doses the fæces become permanently colored, I suspend the use of the iodide for a while, and give some other tonic or alterative, and return again to the iodide in a short time. I thus avoid the irritant effects of the iodide. We see then, as I before said, that the iron preparations mainly pass from the system through the bowels, whereas the iodine passes off by the kidneys, and this I have proved at such times, when the system becomes saturated by small doses of both combined, by finding traces of iodine in the urine, but no iron in appreciable quantities; but iron is found in the fæces in recognisable quantities. There is another proof of the decomposition of iodide of iron in the system. When administered in full medicinal doses, either in pills or in capsules, so that it has no action on the system, until the pills or capsules are dissolved in the stomach, the iodine may be found in the saliva and the iron in the fæces.

Iodide of iron is used to a very large extent in scrofulous complaints, and by its use thousands of children are annually saved. A great majority of the children who live in the crowded, unventilated, and dark tenement houses of our city would be benefited by daily doses of this syrup, for they are troubled with tubercular deposits in the mesenteric and other glands; and it is not until they grow old enough or bold enough to throw off parental authority, and roam the streets with the almost certainty of becoming morally diseased, that they throw off this scrofulous diathesis. In nearly every form of scrofulous disease, the syrup of the iodide of iron will be found of great service, for in all of these diseases you find glandular enlargements which are benefited by iodine, and anæmia which is relieved by iron. I have treated children with tubercular enlargement of the mesenteric glands with this remedy alone, when at first sight a cure would seem to be almost impossible, and when a change of air and diet could not be provided. In diseases of this description, I prefer, if possible, to give the remedy in small and very frequently repeated doses, as one drop every hour while the child is awake. Other preparations of iron are frequently administered with benefit, in larger doses, as they produce other effects than that of a hæmatic; but the iron in this preparation has no astringent or absorbent effects, and is a hæmatic only. The iodine is alterative, diuretic, absorbent,—in one word eliminative. With a compound possessing in a high degree a hæmatic and eliminative action, you cannot but perceive how extensive may be its range of application. It is said by many authors that it acts more like the preparation of iron than those of iodine; but this is not correct, for if administered in either large or small doses, the peculiar effects of the mild iodides are very noticeable. And as we have seen, when administered in large doses to animals it has caused death, not from the effects of the iron, but from the iodine.

It is one of our best remedies in chlorosis, and from the benefit derived from its use in this disease, it has been called an *emmenagogue*.

Like other preparations of iodine, it has been used in bronchocele, and is serviceable when there is anæmia, but if anæmia is not present, the iodide of potassium is generally more serviceable. In scrofulous ophthalmia, or scrofulous diseases of the skin, especially in children, it is very largely used, and may here be administered in rather larger doses. One of the first effects of its administration is an increase of appetite, and an improvement of digestion; but if too long continued or given in too large doses, the appetite will be impaired. In several cases, where it has been given too long and in too large doses, I have seen loss of appetite, nausea, irritability of the stomach, diarrhœa, colicky pains, ringing in the ears, and headache.

Toxicological Effects.—I have read of no cases of poisoning by this article, and I have seen but one case where it produced anything like alarming symptoms. In this instance a little child about four years old swallowed about ʒiss. at one time, immediately after eating. In about a quarter of an hour he complained of pain in the stomach, and after a while vomited. I saw the vomited matter, which was throughout of a bluish black color. The pulse was full and rapid, the eyes prominent and suffused, and the skin bathed with a clammy sweat; there was much retching, and a complaint of tenderness over the stomach, and headache. I gave about two drachms of hydrated sesquioxide of iron in a teacupful of water, and followed it with an emetic. It seemed quickly to allay the urgent symptoms. I then gave a full dose of opium. Before he slept he passed water in large quantities twice, but the next morning there was no secretion of urine. I then gave diluents freely, with liquor potassæ, and more opium. By the next morning he was quite well, having passed urine freely, and having had several free discharges from the bowels of a black color.

Administration.—If given in very small doses, it is well to administer it upon an empty stomach, as it is then more readily absorbed without change; but if given in full doses it is always borne better if given immediately after a meal. In these latter instances there is no doubt immediate decomposition of a portion at least of the medicine, the iodine uniting with the starchy portions of the food, and the iron combining with the vegetable astringents, or decomposed by hydrosulphuric acid gas. To what extent these are taken up in the further processes of digestion

and assimilation, may be ascertained by the examination of the urine and fæces.

The dose usually administered is, to children, from one to ten drops three or four times a day, and to adults, from ten to sixty minims.

In my previous lectures I have given you the chemical composition, the pharmaccutical preparation, the therapeutic action and modus operandi of all the other preparations of iron; with this lecture we finish the consideration of iron and its compounds; of iodine we shall speak at another time.

Original Communications.

HYPERTROPHY AND DILATATION OF THE HEART.

INSUFFICIENCY OF THE AORTIC VALVES, AND MITRAL VALVE. DEATH FROM PULMONARY ENGORGEMENT.

By CHARLES A. LEE, M.D.

PROFESSOR OF MATERIA MEDICA.

J. B. W., æt. 40, of active business habits, nervous-bilious temperament, weight about 135, had been subject to occasional paroxysms of palpitation, and dyspeptic symptoms, for several years. Some cough at times, but generally enjoyed a comfortable state of health. About two years ago began to complain of his heart. The impulse became very strong and violent on slight exertion, accompanied with a constant bellows murmur over the left ventricle, and synchronous with the first sound. There was a sense of exhaustion on slight exertion, with heaving of the chest at each contraction, etc. The most prominent symptoms were, shortness of breath, palpitations from slighter causes than usual, greater delicacy of general health, and a sallow cachectic appearance. These symptoms had gradually come on while employed in a business of great responsibility, and labor of body and mind, attended with much care and anxiety. After resorting to medical treatment in one of our western cities, where he resided for a year or more, without any benefit, and with a gradual increase of ill health, he sailed for England in July, 1860. On his arrival in London, he consulted Dr. Walshe, of London, who prescribed a belladonna plaster over the præcordial region, and a tablespoonful twice a day of the following mixture:—

℞. Acid hydrocyanic. dilut. (Ph. Lond.) ℥ xxx.; sodæ sesquicarb. ʒ ij.; tinct. aurantii, f. ʒ iij.; mist. camphoræ, ad vj.; mix. W. H. W. Aug. 8, 1860. After remaining some time in England, under Dr. W.'s treatment, he visited Dublin, and consulted Dr. Stokes. He advised a sedative ointment over the region of the heart, and no medicine whatever—great attention to general health, food, drinks, exercise, etc. Under this treatment the patient seemed to improve considerably. In September he consulted M. Louis, in Paris. His diagnosis and advice were as follows (I give a translation of his opinion): "Strongly marked impulse at the level of the heart; bellows murmur with the first sound; nervous, respiratory râle; liver laps over the ribs. *Advice.*—Above all, be careful about exercise, and avoid all useless exertion; walk slowly; avoid as much as possible all cause for taking cold, in draughts of air, or exposure to wet or cold; always keep the feet dry and warm. Take a natural alkaline water, the *Vichy* for example, at meals, pure, or mixed with a little wine, as Bordeaux, etc. Keep the bowels free, and take a light purgative once every eight days. Light diet, of which vegetables and white meat should constitute the principal part; avoid liquors, pure wines, and hot drinks. Avoid animated discussions, strong moral impressions, and large meetings—above all, dancing parties, in which the temperature is always bad. The *Vichy* water can also be taken between meals, half a bottle to one bottle daily; a moderate bleeding would be proper, if the difficulty of respiration is considerable."

After following this advice for a few weeks, without much benefit, Mr. W. concluded to consult M. Trousseau, which he did on October 20, 1860. Dr. T. gave the following diagnosis (translation):—

"In the case of Mr. W. the following lesions are apparent. The heart is considerably hypertrophied, and the cardiac impulse is very strong. On applying the stethoscope over the apex of the heart, we discover a rough blowing murmur (bruit de soufflé rude), with the first sound a bellows murmur, with a friction sound over the whole heart, and especially at the base of the heart during the second sound, which is propagated in the direction of the aorta upwards. The arterial pulsations are very energetic, and on applying the stethoscope over the humeral artery, we perceive with each stroke of the heart a simple blowing murmur.

"In my judgment, the consultant is laboring under hypertrophy of the heart, with insufficiency of the mitral valve, chronic pericarditis, contraction, with insufficiency of the ventriculo-aortic valve of the left side. At the present time there is no swelling of the extremities.

"*Treatment.*—For ten days in succession each month, let the patient take every day *one to three tablespoonfuls* of the wine prepared as follows:—℞. Vini albi gallici (champagne), ʒ xxiv.; baccarum juniperi, ʒ ij.; digitalis purp. ʒ ij.; sem. colchici ant. ℈j.; scillæ maritimæ, ʒ j.; acetatis potassæ, ʒ vj. Digest for four days, and filter.

"2. The ten following days, take, morning and evening, in a little water, *ten drops* of the following tincture:—℞. Tinct. belladonnæ, ʒ ij.; tinct. aconiti, ʒ iij.; tinct. nucis vomicæ, ʒ j. M.

"3. The ten following days, take, twice a day, a table spoonful of the following mixture or solution:—℞. Iodureti potassæ, ʒ ij.; aquæ destillatæ, ʒ xx. M. To continue this mode of treatment for several months in succession, and when the patient's health is improved, the same treatment to be followed *every other month.*

"4. As soon as the patient has arrived in America, to apply over the region of the breast a piece of 'caustic potash' in a manner to produce an 'eschar'—to renew this application every fifteen days. The wound to be dressed with simple diachylon plaster.

"5. To avoid all kinds of violent exercise, and to live moderately. *N. B.*—All spirituous or exciting liquids to be avoided. Paris, Oct. 20, 1860. A. Trousseau."

I find, on looking over M. Trousseau's prescriptions, that as early as the 5th September, 1860, he prescribed for Mr. W. six drops three times a day of the following mixture:—℞. Tinct. aconiti, tinct. digitalis, tinct. colchici, ää ʒ ij. Mix. This must have been soon after consulting M. Louis. The patient seemed to improve under this treatment; his appetite and general strength were tolerably good; he could spend a good portion of each day in shopping, sight-seeing, etc. The latter part of October he took passage on board the steamer Adriatic for New York, had a stormy passage, during which he took a severe cold, owing to exposure, followed by severe congestion of the posterior inferior lobe of the right lung. I saw him soon after landing in New York, Nov. 5, 1860, and found him suffering intensely from the combined pulmonary and cardiac affections: extreme debility, pulse very rapid, breathing short and panting, frequent cough, coldness of surface, anxious expression of countenance, etc. A superficial examination disclosed a loud bellows murmur over the whole cardiac region, with hypertrophy of the organ, and solidification (hepatization) of the posterior right lung. The patient was taken by boat to Poughkeepsie, where his relatives resided, and where he expired on Sunday the 11th following. The prominent symptoms were great restlessness, wakefulness, extreme prostration, and pulmonary oppression. During most of the time the cardiac contractions were too weak to develop the peculiar abnormal sounds already noticed. Of course, the diagnosis, so far as the heart was concerned, was necessarily obscure. Death occurred very suddenly from asthenia, doubtless the result of the pulmonary engorgement.

Autopsy.—Present, Drs. E. H. Parker, Varick, Harvey, and myself. Body not much emaciated. No swelling of extremities. But little fluid in cavities of the pleura. The posterior and lower half of right lung in a state of recent hepatization, gorged, and black. Considerable bloody serum, of jelly-like consistence, in the right bronchi. The left lung and anterior superior lobe of the right healthy. The heart was considerably hypertrophied, its size estimated at nearly one half greater than normal. Walls of left ventricle nearly twice the natural thickness. Muscular substance dark red from sanguincous engorgement, and much softer than in health. The aortic and mitral valves were not diseased, but insufficient to prevent regurgitation. This was also the case with the tricuspid valve. The mouth of the aorta was greatly enlarged as well as the arch, so as to be almost if not quite aneurismal in dimensions; leaving the aortic valves not half the necessary size to close the orifice. There were no signs of previous pericarditis, such as adhesions, granulations, etc. The *auricles* were dilated to about twice their natural size. *Chordæ tendineæ* greatly thickened and considerably softened.

Remarks.—As the patient did not come under my observation until a few days previous to his death, the early history of the case is far from being as full as I could desire. Nor are the autopsic appearances as complete as I could wish, my notes of the dimensions of the various valves and orifices, and the weight of the heart, having been lost or mislaid. The immediate cause of death was doubtless pulmonary apoplexy, or engorgement; the obstruction to the circulation having reached that point by the progress of the disease, that the circulation through the lungs could no longer be maintained. The physical signs were more usually attendant on insufficiency of the mitral and aortic valves, the consequent regurgitation producing the usual bellows murmur, with small, weak, intermittent, irregular, and unequal pulse. The action of the heart was for many months morbidly increased both as to strength and frequency; at times there was slight hæmoptysis, more or less palpitation, aggravated by stimulants, active exercise, mental emotion, flatulence, acidity, or bile, and especially by indigestible food. The dyspnœa became more urgent as the disease progressed, as did also the cough; but the sudden and severe aggravation of the disease during the voyage was attributed to a severe cold, caused by exposure, etc. But it is altogether probable, that, under the most favorable circumstances, life could not have been much longer protracted, with such a degree of cardiac disease.

Peekskill, Dec. 11, 1861.

CASE OF

LESION OF THE URETHRA

AND EXTENSIVE SUBCUTANEOUS INFILTRATION OF URINE.

By EDMUND ARNOLD, M.D., M.R.C.S.E.,

OF YONKERS, NEW YORK.

Mr. R. G., widower, æt. about 45, sent for me at 4 A.M. on 26th of September. He had been sick about three weeks, and for the last seven or eight days had not left his bed. His housekeeper stated, however, that for the last ten years he had never been free from purulent and bloody discharges from the urethra, but being considerable of a sceptic with regard to physic and physicians, had been at great pains to conceal the matter, and, as far as I could learn, he had never employed a doctor until now. He believed himself to be affected with stone. He stated that he was now, and had been for several days, suffering great agony from difficulty in voiding his urine, and that he was subject to such attacks. The penis was somewhat swollen and tender to the touch, the prepuce could only be partially drawn over the glans, the orifice of the urethra very much narrowed and contracted, and filled with purulent secretion; scrotum large, but retaining its usual corrugated appearance. The right groin had also a swollen appearance, almost resembling that of a hernial tumor, but more elongated. On employing gentle pressure it gradually disappeared. Here, also, he complained of great pain. He could not exactly explain the kind of pain referred to in various places in this communication, but characterized it as agonizing. No perineal tenderness. There were three or four ounces of highly offensive urine in the chamber, with a copious muco-purulent deposit. Has for several days passed it only *guttatim* or in very small quantities. The patient is restless and agitated, and much worn out for want of sleep. Having, by careful examination, ascertained that there was no distension of the bladder, I ordered, as a preliminary, 2 grs. opium internally, and directed the parts to be kept wrapped in hot hop fomentations.

9½ A.M.—Has slept a little, and says he passes water more easily. Complains now of agonizing pain which has shifted to the right iliac region, with a general sense of fulness in the bowels. Shortly after I entered the room, he vomited a considerable quantity of bile, which, I was informed, he had done frequently during the last two or three days. His aspect was sallow and bilious; pulse full 110; skin warm, and perspiring freely from hot applications. Percussed the abdomen and found everything normal except at the seat of pain, where there was considerable dulness and great sensitiveness to pressure. His bowels, he stated, had been previously regular. I now arrived at the conclusion that, added to considerable fæcal accumulation in the ascending colon, there was a generally inactive condition of the liver and bowels; that the urine, preternaturally loaded with salts and bile, had induced fresh inflammation in a bladder and urethra already greatly diseased, and that the former would have to be regulated before any improvement could be expected in the latter. I tried to pass a No. 2 catheter, but before it had entered half an inch, he complained of such exquisite pain that I desisted. I may here state, once for all, to avoid repetition, that I examined the condition of penis and scrotum at every visit, without any change being perceptible in size or color to indicate the fatal mischief going on until almost immediately before death, and that he spoke throughout of urinating more and more easily. Ordered hydr. chlor. gr. vj., ol. ricini 3 vj. postea. Also, a mixture containing potass. nitr., sp. nitr., tr. hyoscy., mucilag. et aq. Hot fomentations to be continued, also, to have a bath at 90° to be increased to 95°. 4 P.M.—Pain in the side very great during the day, and occasional vomitings. No movement of bowels. Has not yet had his bath. Ordered an injection of warm water with soap. 9 P.M.—About a pint and a half of injection was administered and bowels have been very freely moved, according to the statement of the attendants, nearly a chamberful being evacuated. Has also had his bath, and states that he there urinated with ease. He expresses himself greatly relieved in every way. Pulse 100. The dulness on percussion has shifted to the right hypochondrium; the right lumbar region, however, appears evidently larger than the left. Ordered morph. sulph. gr. j., aquæ ʒj.; a fourth part to be given every half hour until sleep is induced.

27th, 9 A.M.—Took only one dose of the morphine and slept well nearly all night, his first expression on awaking being, that he felt like a new man. He is now beginning to complain of the same pain again, which at present is located in the right hypochondrium. There is a considerable bulging in right lumbar region, but no pain there. On percussion, there is dulness and much sensitiveness at the seat of pain. Does not complain of bladder, although the water still dribbles. Vomited again during my visit some greenish fluid. He takes but little nourishment. Fomentations and medicines to be continued. Another dose of oil to be given, and injection repeated if necessary, also a mustard plaster to be applied over the seat of pain.

4 P.M.—Pain still intense in right hypochondrium, no movement of bowels, no effect produced by mustard plaster, though prepared with alcohol and kept on for an hour. On examining him, noticed a slight purplish discoloration just below the seat of pain in right hypochondrium. Skin

warm and perspiring copiously; pulse still moderately full and soft, 110. Ordered six leeches over hepatic region and requested a consultation.

8 P.M.—Saw him with Dr. Gates. A great change, however, had now come over him. The leeches laid hold, but immediately fell off again. At his own request the bath had been repeated, but he desired to be taken out again immediately; the surface became cold, and the discoloration, now very deep, began to extend rapidly up and down the sides. At the time of our visit, the pulse was small and thready, the general surface cold, and the whole side of a deep purple color from the hip to the armpit. His end was evidently near. We therefore only ordered morphine to relieve the pain. He gradually sank during the night, suffering intense pain towards the last, and died at 5 A.M. on the 28th.

Post-mortem five hours after death.—Body rigid. Immediately behind the glans penis there was a dark ring of discoloration extending round the organ, and thence along its urethral aspect, and spreading over the entire scrotum now smooth and much distended with fluid. It next proceeded along the right groin to the hip, and from thence up the entire side to the armpit. There was a considerable bulging of the whole right lumbar region. On cutting into the scrotum urine exuded, and also similar fluid freely oozed on making the right lateral abdominal incision, the muscles beneath on that side being dark and discolored. As this revealed the whole difficulty, and the friends present would have regarded opening the urethra as a mutilation, this was not done. The body was otherwise in good condition and well covered with fat. On opening the abdomen, the omentum contained a considerable amount of fat; small intestines healthy and moderately filled with flatus, so also the cæcum and ascending colon. At the junction of the ascending with transverse colon, and along nearly half of the latter, there was a considerable amount of soft brown feces, but no inflammation; beyond this, the bowel was empty and contracted, the last injection having probably passed away in the bath; liver large and generally healthy, with the exception of a small portion of the upper surface where there was discoloration, and a small patch of softening so as to break down readily under the finger, and probably of quite recent origin; gall bladder full; stomach and pancreas healthy; spleen not examined; kidneys externally devoid of fat, and their coverings dense and grey colored. On cutting into them, they were large and perhaps rather paler than natural, with several small fatty globules dispersed through their substance, otherwise they did not appear unhealthy; bladder empty as regards urine, the coats very much thickened so as to cut like tripe, its mucous membrane pale, smooth, softened, and covered with purulent secretion, and at the bottom of the organ about a tablespoonful of pus, but no stone.

The symptoms in the above case, making allowance for the pre-existing chronic disease of the bladder and urethra, were, to say the least, puzzling. The increasing ease with which the patient, as he believed, urinated, especially in the bath, the absence of a distended bladder leading to the belief that but little urine was secreted, the course of the pain along the region of the colon, and the evident accumulation in the latter, the sallow aspect of the patient and his frequent bilious vomitings, the bulging and first appearance of discoloration in the hypochondrium, rendered the diagnosis extremely difficult. The swelling in the scrotum was not sufficient, until just before death, to remove the ordinary corrugated appearance of the skin, nor could I detect at any time tenderness in the perineum. The lesion at the anterior portion of the urethra, due no doubt to ulceration, had, from the swelling in the groin, which I could not satisfactorily account for on my first visit, undoubtedly occurred some time previously, and it was the insupportable agony induced by the infiltration of the acrid urine through the tissues, that alone forced him finally to send for a physician. His death gave the first intimation to friends and neighbors even of his sickness, and though for ten years he had, to conceal his malady, washed his own shirts and never slept in sheets, and must have endured great suffering at times, his demise actually seemed to all something unaccountably sudden and mysterious.

CASES IN MILITARY SURGERY.

GUNSHOT WOUNDS OF PELVIS, THORAX, KNEE, TRACHEA, THIGH, AND ARM.

By WILLIAM O'MEAGHER, M.D.,

SURGEON 37TH REGIMENT, N. Y. V.

Gunshot Wound through the Pelvis, Intestines, and Anterior Abdominal Wall.—On the night of Tuesday, Aug. 27th, while a large portion of the regiment was on picket duty at Bailey's Cross Roads, at that time one of the outposts of the army on this side, the reserve corps, stationed in front of a house adjacent to the road, resting themselves until their turn should come to relieve the others, were suddenly startled to their feet by the report of some shots fired at a little distance in the rear. A sudden rush was made for the muskets lying on the ground before the men, and, in the confusion incident to the sudden movement, one piece went off accidentally. The next moment I saw one of the men, who happened to sit in advance of the main body against the railing in front, and a little behind another officer and myself, suddenly start up and then tumble over writhing in agony. He rose again, tottered a few paces, and again fell over.

In consequence of our immediate proximity to the enemy, then only a quarter of a mile distant, I was unable to use a light during the necessary examination; besides, he was with difficulty kept from rolling about, until his agony was somewhat relieved by a grain of morphia. Meantime, I was engaged in exploring the wound, which was plainly indicated by abundant hæmorrhage and by the patient himself pressing his hands tightly on the lower portion of his back. The bullet had passed through the upper part of the left sacro-iliac symphysis, through the intestines, escaping anteriorly in the right groin, and finally, through the clothing, being then lost. Vomiting soon set in, and during the consequent exertions, a knuckle of small intestine, wounded, protruded through the anterior opening, but was easily reduced when the vomiting ceased, and he was able to swallow some stimulants and another opiate. Compresses of lint and a broad bandage were then applied, the hæmorrhage ceased, and pulsations in the radial and femoral arteries indicated commencing reaction. A door, taken from the hinges, covered with straw and a blanket, served for a litter, on which, supported by muskets and relays of six men at a time, he was carried a distance of about three miles until we reached the field ambulance, which, owing to the road being obstructedly barricaded, could not approach nearer.

He was thence carried to the Washington Infirmary on E street, where he died in about fifteen minutes afterwards, and about ten hours after the accident. During the journey he was somewhat comfortable, notwithstanding the roughness of the road, and seemed to rally pretty well, sufficiently to converse with the chaplain. Vomiting had not returned, and he was thus able to take stimulants combined at intervals with anodynes. Though very anxious to see the post-mortem examination, which I presumed would follow, I was prevented calling at the hospital owing to more engrossing duties. I called there subsequently, however, and asked the surgeon in charge, by note, to furnish me with the record, but I received neither a reply nor the expected information.

Gunshot Wound of Thorax and Lungs.—Private Cooke, of the 2d Michigan, while on picket duty near the Cross Roads, received from the enemy's picket a gunshot wound through the lungs, and when discovered by his comrades, who hastened to the spot, was found faint from profuse hæmorrhage, and lying on the wounded side. By them he was conveyed in a blanket to the main body stationed at

the Cross Roads, the distance being about a mile, and on their arrival I saw him immediately. On examination, his clothes behind were found saturated with blood, while several large clots were removed from the immediate vicinity of the wound. As he was extremely prostrated, some stimulants were gradually administered until reaction commenced, and, in the meantime, I was searching for the exit of the bullet, which had entered the left side posteriorly, fracturing the tenth rib and making quite a large, irregular, wound. On introducing my finger for about two inches for the purpose of exploring and removing foreign substances, I felt the lung tissue, and found the wound itself partially filled with coagula and extending towards the opposite side in a transverse direction; emphysema appeared to some extent in the vicinity. I did not attempt a further exploration, especially as the wound, as far as I could discover, appeared free from foreign substances and partially closed. Shredded lint was then applied to the wound, and the patient gently turned over on the wounded side. On searching for the exit of the ball, the only indication of its presence was a patch of emphysema on the opposite side, somewhat higher up than the aperture, but the ball itself could not be felt, so I resolved to wait awhile in order to allow the patient to recover somewhat, hoping that, in the meantime, the respiratory efforts, increased by a pretty tight bandage, would force the ball outwards and thus render it palpable. Accordingly, in about four hours, he began to experience severe pain in this part, and on removing the bandage, at the same time directing him to take in a full breath, which he did with ease and evident relief, I was exceedingly gratified to find the ball presenting itself in the sixth intercostal space. On cutting down, I found it firmly imbedded in the costal pleura, and after a little delay, occasioned by a desire not to make a large opening, removed it with a common forceps, and immediately closed the wound with interrupted sutures. The bandage was again applied, and a full anodyne administered, after which he slept well for two hours and felt very much relieved. The missile, contrary to my first anticipations, turned out to be a small triangular shaped rifle bullet, irregular and rough at the edges, as if it were so designed to produce greater mischief. He continued very comfortable for two days, taking light nourishment and appearing quite cheerful and intelligent, occasionally only being attacked with dyspnœa, which, however, was never sufficient to cause any apprehension. Obedient to directions, he lay perfectly still, without talking, except in answer to a necessary question as to his condition. His bed was a canvas field-stretcher, with poles inserted into the folded canvas, which was also attached to the end pieces by buttons and cords. The iron framework at the ends raised it from the ground sufficiently to afford a safe, easy, and efficacious means of transportation, far superior, in my opinion, to any other thus far presented, and certainly better than field ambulances over rough roads. On this he was conveyed, on the third day, a distance of perhaps ten miles, to the general hospital in Alexandria, where he died on the fifth day. I am indebted to Dr. H. Laurence Sheldon, the surgeon in charge, for the following record of the autopsy:—

"Left side of chest filled with bloody serum; lung compressed, and a space between anterior parietes and surface of lung filled with air. Lymph covered the visceral and parietal pleuræ, and clots of blood were on the most dependent portion of the cavity. The ball struck the tenth rib, fracturing it three inches from its articulation with vertebræ, passed through the lower lobe of left lung, where there was intense inflammation in its track, with numerous spiculæ of bone carried two inches into substance of lung from the fractured rib, thence through body of tenth vertebra, through diaphragm and upper surface of liver, a distance of two inches; again through diaphragm, and was removed externally between sixth and seventh ribs. There was a patch of pneumonia on the right lower lobe. Half a gallon of serum and blood was taken from both pleural cavities."

I should have mentioned as rather remarkable, that, for three days, though he had considerable dyspnœa, and pain referred to in both places, he had neither cough nor expectoration until the fourth day, leading some to suppose that both lungs were not seriously wounded, as I had at first reported, the ball rather making a circuit *outside* the lung. But I think it almost impossible that the right lower lobe could escape when the ball passed *twice* through the diaphragm and upper surface of the liver, being finally removed from the *sixth* intercostal space; besides, "there was a patch of pneumonia on the right lower lobe, and half a gallon of serum taken from *both* pleural cavities."

Bayonet Wound of Trachea—Emphysema.—Private Betson accidentally received a thrust of a bayonet in the neck opening into the larynx and producing considerable emphysema, tickling cough, and bloody expectoration. He recovered rapidly, however, without a bad symptom, some slight aphonia alone remaining for a short time.

Bayonet Wound of Knee-Joint—Synovitis.—Private —— received an accidental wound of the knee-joint, between the border of the patella and internal condyle of the femur. At first, little was thought of it, a few adhesive straps and a roller bandage being applied, and the patient returned to duty. In a few days, owing, doubtless, to imprudence and over exercise, inflammation, accompanied by pain, fever, swelling, and effusion, set in, while the wound assumed an angry fungoid appearance; but by means of rest in the recumbent position, elevation of the extremity, water dressing, and other antiphlogistic adjuvants, the pain and other symptoms slowly abated at the end of three weeks, leaving the patient, however, lame and stiff at the joint.

Gunshot Wound of Thigh.—Lieut. Massey, while on picket duty at Munson's Hill, received a shot from a small revolver, the bullet lodging anteriorly in the upper third of the thigh, near Scarpa's space. After a thorough search for the bullet, both by Dr. McNulty and myself, it could not be found. A pledget of lint, wet with cold water, was applied, and the patient directed to keep quiet. Two or three days afterwards, though the irritation and pain still continued, he felt so well that he asked permission to go around with a stick, which was permitted. For a while he walked rather lame, but gradually he began to exercise more freely, and in less than three weeks returned to duty. It has not troubled him since.

Capt. Rividan received a shot from a revolver, the bullet passing antero-posteriorly through the calf of the leg, about the middle, and externally to the tibia, which, though grazed, escaped uninjured. In this case, also, the patient, after a few days' rest, began to walk around freely, and in three weeks resumed his ordinary duties. The same gentleman subsequently received a wound of the great toe, on the march to Fairfax Court House, on the eventful day of the battle of Bull Run, by which the toe was severely mashed, requiring evulsion of the nail. He continued to march notwithstanding, though offered a mode of conveyance, and, when the regiment was ordered to return to Alexandria, remained with his company during a severe night. Cold water dressing only was applied with lint and bandage, and in a few days the wound was entirely healed.

Gunshot Wound of Right Index Finger—Fracture of the First Phalanx.—Sergeant Scott had the index finger of right hand wounded by a ball from a revolver, fracturing the first phalanx about the middle, the joint also being opened and injured. At first, amputation was thought to be necessary, from the mutilated condition of the finger, but it was resolved to try what conservative surgery could effect, for a day or two. Accordingly, a splint was applied on the palmar aspect and cold water dressings used, the arm being suspended in a sling. For three weeks subsequently, nothing more was done, except to renew the dressing. The external wound healed up kindly within that period, and in a month he was able to use his musket, the stiffness of the joint having been overcome by passive motion.

Gunshot Wound of Arm.—Private Hicks received a

shot from a revolver in the lower third of the arm, the bullet passing through the muscles only, and making its appearance on the inner aspect. It was cut out by Dr. McNulty, and the patient, after a short sojourn of a few weeks in hospital, returned to duty.

Camp Richardson, near Alexandria, Va., Dec., 1861.

Reports of Hospitals.

NEW YORK HOSPITAL.

CONTUSION OF PERINEUM—LACERATION OF URETHRA—PERINEAL SECTION—CURED.

[Reported by James L. Little, M.D., Resident Surgeon.]

Pat. O'Brien, æt. 30, native of Ireland. Patient admitted May 8, 1861 (service of Dr. Buck), having fallen down the hold of a vessel, a distance of six feet, alighting astride of a plank. Patient was able to walk up stairs to his ward. On examination, there was seen considerable swelling and discoloration of the perineum and scrotum, without any laceration. There was, also, a slight discharge of blood from the urethra. Patient complained of great pain in the part. As the above symptoms indicated some injury to the urethra, an attempt was made to pass a large-sized catheter, in order to prevent the extravasation of the urine. It was found impossible to pass it beyond the seat of injury. A profuse discharge of blood followed the removal of the instrument. The patient was then directed not to attempt to pass his water, and he was allowed to remain until the visit of the attending surgeon, Dr. Buck. On his arrival, a second attempt was made to pass a catheter, which also proved unsuccessful. Patient was then etherized, and a free incision made in the median line of the perineum, allowing the escape of a considerable quantity of clotted blood. A No. 12 catheter was then passed, and its point emerged from the wound. An examination then showed that the membranous portion of the urethra was torn entirely across by the accident. An attempt was then made to pass a female catheter from the incision into the bladder. This was a very difficult operation, as the parts around the urethra were very much contused and the hæmorrhage was very free. But after a diligent search, the opening was found and the catheter entered the bladder. A male catheter was then introduced through the urethra, and after carefully removing the female catheter, passed into the bladder. During the operation, patient lost a considerable quantity of blood. The hæmorrhage was controlled by the application of several ligatures. The wound was filled with lint, and a firm compress applied. The catheter was secured in its position and stimulants ordered.

The following day the dressings were removed and the catheter was withdrawn and cleansed, and reintroduced without any difficulty. The wound was ordered to be dressed with cold water. On the third day after the operation, the catheter was again withdrawn and allowed to remain out of the bladder. The water made its escape from the wound. From this time the catheter was introduced once in twenty-fours and allowed to remain in for about ten minutes. The wound soon began to granulate. On June 1st, patient complained of a pain in his leg and groin. On examination, the left inguinal glands were found to be enlarged and very tender, and along the course of the internal saphena vein a cord-like feeling was detected and considerable tenderness was manifested. The left leg was swollen and œdematous, resembling the disease known as phlegmasia dolens. A blister was ordered over the upper part of thigh; leg bandaged, and patient supported by beef tea, quinine, etc. June 10th. Swelling of the leg had nearly all subsided. The wound in perineum was almost closed. Patient passed about one half of his urine through wound. June 19th. Six weeks after injury, patient passed all his water through the natural orifice. Catheter was passed about three times a week.

During the month of July, an interval of about one week passed without the catheter being introduced, and patient's water suddenly stopped. On attempting to pass an instrument, it was found that it was with great difficulty a No. 3 steel sound could be introduced. After its introduction, the stricture readily dilated until a No. 10 could be introduced. On Sept. 23d, patient was discharged. At the time of discharge, a No. 10 could be readily introduced. As the instrument passed over the stricture, considerable roughness could be felt, and if an instrument was not frequently introduced the stricture would contract, and would require to be dilated, which was very readily done, as the cicatrix was very yielding. Patient purchased a No. 9 flexible bougie, and was ordered to introduce it every day. Discharged cured.

BELLEVUE HOSPITAL.

OLD STRICTURE—FISTULOUS PASSAGES—PERINEAL SECTION—FORMATION OF LARGE INGUINAL ABSCESS—DEATH.

[Reported by A. L. Lowell, M.D., House Surgeon.]

Louis Vanderbec, German, æt. 43, married; laborer; admitted June 18, 1861, with the following history:—Six months prior to admission, the patient suffered from the effects of stricture of the urethra; was treated outside and relieved; at date of admission was again suffering from stricture, and almost wholly unable to void his urine. On examination, the following facts were evident:—Extensive swelling and induration of scrotum and supra-pubic region. Prepuce œdematous; penis nearly occluded, save the glans, by swelling of contiguous parts; phymosis; exploration of urethra by sound, revealed stricture at fossa navicularis; false passage traceable to and terminating at a point anterior to triangular ligament and to right of median line. A very small gum elastic bougie could, with much difficulty, be engaged in a stricture at the membranous portion of the urethra. All attempts to pass the stricture of membranous portion proved futile.

The patient suffered from retention, and the only relief of his symptoms was effected temporarily by the use of the hot bath and laxatives; these agents were employed as palliatives until the date of the operation. Several cicatrices in the inguinal regions attested earlier ravages of syphilis, to which may be added a chronic sore throat, laryngitis, and the history of the patient himself as corroborative of such cachexia. There also existed cicatrices, linear in outline, on the right of the median line, about three inches above the symphysis pubis, and a little nearer the median line than half the distance between it and the anterior superior spinous process of the ilium. Of these cicatrices, the history of abscesses was given as having occurred during his first attack, they having been opened at that time.

On August 19th, the patient's symptoms culminated in a high irritative febrile movement, and a total retention of urine, which latter no palliative efforts could relieve. An operation was determined upon, and performed by Dr. Lewis A. Sayre, assisted by Dr. Crane and the house staff.

A grooved lithotomy sound was passed down the urethra to the seat of the stricture at membranous portion, and the point of obstruction was forcibly projected outwards upon the line of the raphe. An incision was then made through the membranous portion, and, by dissection, the continuity of the canal with the bladder was established. A No. 8 silver catheter (male) was then passed into the bladder by the meatus urinarius, after establishing the true urethral canal by reversing a probe at the point of perineal section. A female catheter was left in the incision, which conducted the urine away from the wound. Both cathcters were secured in position by bandages. The walls of the bladder were found exceedingly rugose and hypertrophied. The sensation imparted to a sound brought in contact with the lining mucous membrane, strongly simulates stone.

The patient slept well during the night on a slight anodyne, and on the following day his symptoms were much ameliorated. On the second week after the operation, he began to complain of severe throbbing pain over the right inguinal region. Poultices were applied, the pain increased, and tumefaction and much increase of temperature at this point succeeded. On the fourth day, chills and fever occurred, and a marked redness and lividity were observable at a point on the median line about three inches above the symphysis pubis. A slight incision through the integuments was followed by an evacuation of nearly half a pint of dark-colored pus of a very offensive odor. On passing a probe into the incision, no communication could be traced with the bladder; the instrument could be readily swept around beneath the fascia of nearly the entire right iliac region. Pressure over the bladder caused an escape of urine from three different points of exit—the above-mentioned opening, the urethra, and the incision through the perineum. On washing out the bladder, by inserting the double catheter through either the perineal wound or the urethra, the injected fluid escaped from both the other openings. The patient gradually sank, and died on the 19th of August from exhaustion.

Post-mortem examination, twelve hours after death.—Lesion about recto-vesical region, prostate, and base of bladder, much broken down and sloughy. Bladder exceedingly rugose on inner surface; its walls much thickened, evidently the effects of former cystitis. Ureters enlarged as to calibre. Right kidney slightly granular; left below normal size and weight, and showing marked evidences of granular degeneration. A fistulous track was traced between supra-pubic opening and membranous urethra behind triangular ligament. In right hypogastric and inguinal regions, much sub-fascial degeneration, showing cellulitis from urinary infiltration. This region, as well as that about base of bladder, was darkly discolored and sloughy.

Patient suffered much from cephalalgia, and frequent and almost uncontrollable watery dejections. Skin white and waxy. Urine constantly highly albuminous. Under the microscope, it was found loaded with casts, epithelium, pus globules, and salts, triple and basic phosphates.

RETENTION OF URINE—LACERATION OF URETHRA AND FALSE PASSAGES FROM FORCED CATHETERISM—PERINEAL SECTION—RECOVERY.

[Reported by HENRY M. LYMAN, M.D., House Surgeon.]

In November, 1860, Matthew L., an Irishman, strong and healthy, æt. 25, was injured by a cotton bale falling against his abdomen. For two weeks after this accident he could not urinate without the assistance of a catheter, and there was also a purulent discharge from the urethra. The patient denies the existence of any venereal taint, nor does he exhibit any evidence thereof. As he recovered from the effects of the accident he became able to pass water, though not without considerable difficulty—a difficulty which continued to increase till Oct. 14, 1861, when the urethra became impermeable. The patient was diligently plied with catheters by several parties outside of the hospital, and, on their failure to effect an entrance into the bladder, he was admitted and placed under the care of Dr. Stephen Smith, Oct. 15th, thirty hours after the commencement of retention. The bladder was distended to the umbilicus. A hot bath and the administration of opium having failed to afford the slightest relief, he was placed under the influence of ether. A catheter (No. 10) was then carried easily through the greater part of the membranous portion of the urethra, but was completely arrested at the prostatic portion of the canal. After repeated trials, a minute hair bougie seemed to penetrate the stricture, but without effecting any relief, and at midnight Dr. Smith proceeded to open the urethra through the perineum. A small silver probe was then with some difficulty insinuated through the prostatic portion of the canal, which was afterwards incised sufficiently to admit the largest sized catheter. Considerable febrile reaction occurred after the operation, and there was much irritation about the neck of the bladder; but at the end of five days all unfavorable symptoms disappeared, and an uninterrupted process of recovery has continued till the present time. A small opening remains unhealed, but it is closing rapidly and kindly.

To the foregoing cases we may add the following case of perineal section, furnished by Prof. DEWITT C. ENOS, of Brooklyn.

INGUINAL HERNIA—RETENTION OF URINE—PUNCTURE OF THE BLADDER THROUGH THE RECTUM—PERINEAL SECTION—RECOVERY.*

Mr. S., a merchant in New York, while lifting a heavy weight, on Wednesday, June 17, 1857, produced a direct inguinal hernia on the right side, and the day after had some difficulty in making water. His bladder became distended and his suffering intense. He had been a very healthy man, and never had a stricture. From Friday until Monday ineffectual attempts were made, with great care and perseverance, and with a variety of instruments, to enter the bladder. During this time he passed a little urine occasionally. On Monday he was no better. Chloroform was given, and another effort made to pass the catheter without success.

I then tapped the bladder through the rectum, and drew off about three pints of urine. The canula was secured in the bladder. The day following no water would pass through the instrument, and it was found that during the night it had slipped from the bladder, and its end was in the cellular tissue between the bladder and rectum. As it could not be introduced through the original opening the style was used and another aperture made. The corpus spongiosum urethræ was hard and much inflamed. Leeches and fomentations were applied to the perineum. The scrotum becoming œdematous and inflamed, and the corpus spongiosum much swollen towards the bulb, it was decided to open it, and then if the catheter could not be passed to make a perineal section. The patient was put under the influence of chloroform, the incision made, and an ounce or two of laudable pus was discharged. Still the catheter could not be passed. I then made a free opening into the urethra, and even then the instrument in the penis could not be carried into the bladder. There was a false passage in the corpus spongiosum, from an inch to an inch and a half anterior to the bulb down to the bulb itself, but even when the instrument was in the true passage it could not be passed into the bladder. A small, gum elastic catheter was passed with great difficulty from the perineum into the bladder, and retained. Sickness at the stomach and vomiting followed the use of the chloroform for several days. The canula was removed from the rectum twelve days after it was introduced, and four days after the perineal section was made, at the same time a No. 7 gum catheter was passed into the bladder through the perineum. Two days after a No. 10 was passed through the perineum into the bladder, and also the same size through the penis to the wound, the last not retained. After the lapse of two days a No. 9 gum catheter was passed per viam naturalem. This gave him no pain. The catheter was changed for a No. 10, and this for No. 12, which was used for a month or a little more, when the wound, to which water-dressings only had been applied, appeared healed, and it was removed. He made water without pain—a few drops only escaping from the wound, which soon closed entirely.

The catheter was introduced occasionally that the urethra might not contract. He wore a truss a few days, only for the direct inguinal hernia, and it troubled him no more.

It is difficult to understand how such an effort—straining—could have obstructed the urethra, unless the membranous portion was lacerated by the violent and irregular contractions of the compressor urethræ. It is a noticeable fact that

* Read before the Kings Co. Medical Society.

though the canula was introduced the second time and was retained in the bladder nearly two weeks, yet there was after its removal no evidence of urine escaping into the rectum. It is now three years and a half since the operation, and he says he is as well as ever. His urine is voided in a full, free stream, and no return of the hernia.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, October 23, 1861.

DR. A. C. POST, PRESIDENT, IN THE CHAIR.

INTERESTING SYMPTOMS CONNECTED WITH MITRAL DISEASE.

DR. CONANT exhibited a heart which was taken from a girl, about seventeen years of age, whose case he had followed up more or less closely for the last eight or nine years. When the patient was first seen, at the age of eight years, she had a blowing sound in the left portion of the heart, so distinct that it could be heard even before the ear was applied to the chest. This abnormal sound continued to exist without any material change in character for the next three or four years, and her general health seemed to be very good. At the age of fourteen she commenced to menstruate, and from that time until her death experienced no variations in the quantity or duration of the discharge. About two months previous to her death Dr. Conant was called to see her in an attack of what appeared to be cholera morbus, accompanied with considerable œdema of the feet. All this, however, subsided after the administration of the ordinary remedies, and she was soon strong enough to resume her daily labor in a hoop-skirt factory. Three weeks after this Dr. C. was called again to the case, on a Monday morning, when he made out in addition to the second attack of cholera morbus, the existence of rather a peculiar symptom, one which he had never seen before, which was the absence entirely of the pulse at the wrist—there was nothing more than a slight quiver, which resembled the pulsations to the jugular vein when there was interruption to the pulmonary circulation. He listened to the heart and found that neither of its sounds was at all distinct. A careful examination of the popliteal, femoral, carotid, and other superficial arteries revealed the same state of things. This condition of the circulatory apparatus remained for several days, and Dr. Conant came to the conclusion that one of two things had happened: either a fibrinous clot had formed in connexion with the valves, preventing their closure, or there was ulceration of the valves themselves which allowed the blood freely to regurgitate. Some carbonate of soda was prescribed in the hope that the clots, if any such existed, should be dissolved, and other remedies were also given for the vomiting and purging with the effect of controlling those symptoms. Six or seven days after the first appearance of the symptoms the radial pulse became very slightly perceptible, but so irregular that it was impossible to count it. The sounds of the heart were more distinct, but were far from being natural. For a day or two before her death she was again seized with vomiting and purging, which, despite the various remedies used, continued until her death.

A post-mortem examination was made on the day following, and in accordance with a promise made the mother, only the heart was removed. Upon opening the thorax a considerable amount of adhesion was noticed between the pericardium and heart, but there was no serum. The left lung was completely adherent to the chest, the result of old pleuritic deposits. In the cavity of the chest there was a pint of serous fluid, otherwise the organ was healthy. On dissecting out the pericardium Dr. C. removed the heart and aorta. On opening into the organ the tricuspid valves were apparently perfectly normal; the mitral valves were very much thickened, and just above them, in the left auricle, quite a large deposit, apparently calcareous, was found; also a similar deposit above the valves underneath the endocardium. The organ was somewhat flabby, but was not enlarged. The case was interesting, because Dr. C. thought that there could have been no possible doubt but that extensive disease of the semilunar valves existed. The fact that he could find no pulsation in any of the arteries led him to refer the disturbance to some general cause, but what that was he could not ascertain, inasmuch as the examination was necessarily limited.

SUCCESSFUL REMOVAL OF THYROID GLAND.

DR. VOSS gave the following history of a lady aged fifty-four years, from whom he had removed a hypertrophied thyroid gland. At the age of twelve she first noticed an unnatural fulness of the throat, which gradually became more marked and defined up to the time of the operation. No reason could be found for the appearance of the growth, either so far as hereditary, endemic, or any other influences were concerned. During the whole of her menstrual life, which extended from her sixteenth to her forty-eighth year, she had always suffered from dysmenorrhœa, and was in consequence childless. At different periods of the existence of the tumor various forms of medication were resorted to, but the only effect was a slight diminution in its size. Within the last seven years the tumor, having attained quite a large size, occasioned her a great deal of difficulty in swallowing and breathing, so much so that towards the last she was unable to lie down. While in Germany, she applied to have the tumor removed, but the operation was denied to her. At that time she was directed to take iodine, which she did, until iodism was induced. Her sufferings from the presence of the tumor at last became so aggravated that she earnestly requested its removal. The size of the tumor before the operation was equal to that of a clenched fist; it was flattened antero-posteriorly. It was situated more to the left than the right, and consequently pushed the trachea to the right side. On palpation neither fluctuation nor pulsation could be felt. When standing erect the head could be moved very well from side to side, but the slightest motion backwards occasioned her distressing dyspnœa. The difficulties in the removal were comparatively small. A long incision was made from the upper part of the thyroid cartilage down to the manubrium of the sternum. As one part of the mass on the left side reached somewhat behind the sternum, the detachment of the tumor was commenced on the outer surface, and the vessels which came from the lower right side were secured. There was comparatively a small amount of venous hæmorrhage in this step of the operation, but when the left side of the tumor was reached the venous flow was very profuse and unmanageable, until the mass being detached as far as possible the chain of the *écraseur* was placed around it and the whole removed. The resulting wound was perfectly dry. The patient progressed remarkably well since the operation, the pulse at no time during the last two weeks exceeding ninety beats per minute.

The tumor on microscopic examination proved to be non-malignant in character, and composed of fibroid, colloid, and vascular tissue.

DR. WOOD remarked that operations connected with the thyroid gland were always interesting in connexion with the great amount of hæmorrhage that was apt to occur. He stated that the operation for the removal of this gland had been performed two or three times in this city. He knew of two instances of death from venous hæmorrhage. "I recollect," remarked he, "that when I was a student there was a gentleman in this city who attempted the operation upon an English lady; he cut down upon the body, and before he had fairly removed it the venous hæmorrhage was so great that she died. I recollect another case, where the operator attempting to remove the tumor took the precaution to apply ligatures at four different points. They were introduced doubly by needles, and then tied, but so great was the hæmorrhage that the next morning death

resulted. I remember seeing the chairman operate on one of these cases and the same thing obtained there; the veins were enormous. If I remember rightly he did not continue the operation necessary for its removal. I take it that the tumor presented to-night is a very unusual form. I have never seen the thyroid body presenting that appearance, having the three characters, vascular, fibroid, and colloid combined."

Dr. Post remarked that the case alluded to by Dr. Wood was one which had been previously seen by Drs. Mott and Van Buren, and neither they nor he regarded the thyroid body as being the seat of the disease; the actual magnitude of the tumor disguised its origin. When, however, the operation was commenced by Dr. Post it was found that the thyroid body was the tumor, and that the veins which ramified through its substance varied in size from that of the little finger to the thumb. One lobe of the tumor was so much exposed that he applied to it two ligatures, and afterwards unwisely exsected a portion of it. The operation was abandoned, and shortly after frightful hæmorrhage succeeded, and Dr. Wood being near at hand available assistance was rendered. A good deal of febrile excitement followed, the tumor diminished one half as the result of subsequent suppuration, and the patient finally recovered.

Dr. Voss, in answer to a question from Dr. Sayre, gave it as his opinion that the unpleasant result of alarming hæmorrhage was prevented by the timely use of the *écraseur*. He stated that the profuse hæmorrhage at the lower and left part of the gland was due to a large vein which was fully the size of his finger. In the application of the écraseur this vein was left free, the upper parts of the tumor were grasped, and when the supply of blood from the superior thyroid arteries was thus cut off the venous hæmorrhage ceased at once. He agreed with Dr. Wood in saying that the tumor was unique in character, from the fact that it combined three characters in one, and contained none of the cystic elements of which goitrous tumors were for the most part composed.

American Medical Times.

SATURDAY, JANUARY 4, 1862.

TREATMENT OF COMPOUND FRACTURES.

We cannot let a remark by an army surgeon in the Medical Times of Nov. 30, pass without adding a few observations which it suggests. Writing from Springfield, Mo., after a visit to the hospital in which were many of the wounded at the battle of Wilson Creek, where the brave Gen. Lyon lost his life, Dr. Rawson, Surgeon to the 5th Reg., Iowa Vols., says:

"I was shown several cases of compound comminuted fracture of the thigh, leg, and arm, in all of which the bone had united, and some healed up permanently, and in others there was more or less of exfoliation, but with every prospect of final recovery. I saw one case of badly shattered ankle joint, by a large grape-shot burying itself within. The shot was removed, and the doctor said the limb would have been amputated, only that there was no adhesive plaster in town. * * * * Considering the number of cases, the serious character of the injury, and the result in all of them that I saw, I can but come to one conclusion, that many, very many limbs are removed that might be saved, and this I will show at some future time."

The question involved in this paragraph has been one of the most interesting and important in civil or military surgery. In what cases of compound fractures can the limbs be saved, and in what must they be sacrificed, is the anxious study of every enlightened and conscientious surgeon. The rule governing the operator heretofore has been quite arbitrary; he has had little opportunity to exercise his judgment, or consult the modifying circumstances which surrounded him. It was quite sufficient in military practice to know that a compound fracture was occasioned by a gun-shot, to have the course of treatment definitively settled. Amputation was practised without hesitation, and without consultation. Two facts derived from experience established this rule; one, that great mortality followed these injuries where amputation was not performed, and the second, that when the limb is saved it is often useless. Within given limits these reasons in favor of amputation are both valid, but it is evident that they are very unsafe guides to any but the most conscientious and experienced surgeons. Liberally construed, these facts allow the utmost license to the operator, and do not, we are persuaded, give the maximum of useful limbs saved, and the minimum of lives lost.

There can be no doubt that in civil practice many limbs and lives are now saved in compound and complicated fracture that at no remote period past would have been sacrificed. Older surgeons would scarcely have thought of saving a limb in which the fracture involved the joint. In military practice there are evidences of a strong tendency towards the conservation of fractured limbs, however complicated. Fractures involving large joints do not now lead to the immediate condemnation of the extremity. Resection might still give a favorable issue to the injury. The recent report of the British army shows that in the late war in India amputation was not so frequently performed after compound fractures of the femur as in the Crimea, and that more cases were saved. Mr. Taylor, Inspector General of Hospitals, remarks upon the tables establishing these facts:—

"The preceding tables show, of the Indian wars as compared with the Crimean war, that the thigh-stump cases arrived home from India are a fraction more numerous than those from the Crimea, in proportion to the total arrived by all wounds; and that the recovered cases of gunshot fracture of the femur also arrived are, in proportion to the total wounded, four times more numerous from India than from the Crimea. In other words, the proportion of thigh-stump cases being so nearly the same, the gunshot fracture of the femur cases from India, over and above the proportion from the Crimea, may be received as representing the proportion of cases of this description of wound lost there by amputation, or by less favorable circumstances of service. The difference, I believe, is to be explained by the better appliances and means attending field hospitals in India, and the less frequent practice there of amputation in this description of wound. The difference is not to be explained by difference of missiles; for in the Peninsular war, where no other than the sixteen to the pound bullet was used, the impression of surgeons experienced in the surgery of that war was, that in only few exceptions should a gunshot fractured thigh not at once be amputated. This rule greatly influenced the practice of surgery in the Crimean war, and hence, in a considerable measure, I believe, the less favorable results thence than from the mutiny in India, when surgeons were not only deterred from amputation of the thigh by the Crimean experience of the fatality attending that operation, but were more inclined to attempt preservation of the limb by the better means at hand for the conveyance and treatment of such compound fractured thigh-cases."

A DEACONESS INSTITUTION.

Eighteen years ago two benevolent ladies of Strasburg, France, went forth with bread and medicine among the poor and sick of that city. From that small beginning has grown up an Institution far-reaching in its influences upon the destitute poor. Its aim is to educate women to the care of the sick, and qualify them by practice for all the duties that devolve on the managers of Charities. The result of this effort has been in the highest degree satisfactory. A visitor at this institution three years after its organization, when the little band lived in a small hired house, thus describes its internal appearance: "In 1846—fifteen years ago, and but three years after the commencement of the Institution—it was our privilege to visit the hospital, asylum, and charity schools under its care, and we have ever since preserved a most pleasant impression of all their surroundings. There was about them an indescribable something which touched our heart, and the influence of which we feel to this day. The very atmosphere seemed to breathe of purity and peace. The linen of the beds was of faultless white, the floors were scrupulously clean, the sick and aged ministered unto with unaffected kindness, the charity to the poor so sweet and genuine, and the whole bearing of the deaconesses indicative of a piety so evangelical and healthful, that we went away with the conviction that a future, full of honorable usefulness, awaited this youthful Institution." From the eighteenth Report, 1860, an abstract of which we find in the *Lutheran Observer*, it appears that this organization now numbers eighty-four well trained nurses, whose labors extend to many neighboring hospitals, asylums, etc. Thirty-five are devoted to the following charitable institutions of Strasburg: 1. A large hospital, which since its commencement has nursed many thousands of sick, and during the past year numbered 247 patients. 2. A Retreat for aged and feeble persons, who are destitute of friends; these number twenty. 3. A Training School for Domestics, the object of which is to qualify young girls to be servants in respectable families. 4. A House of Refuge (*Disciplinaire*), the inmates of which have been committed by the police for offences of a less grade than would send them to prison. 5. The Magdalen Asylum, for the fallen. 6. The Children's Protection, Creches, where poor women, compelled to go from home to work, leave their babes during the day, and call for them in the evening. The "Creches" has daily from thirty to forty of these little ones. 7. A large Soup House, where the very indigent are supplied with soup during the winter months. Forty-nine are engaged in similar institutions in various parts of France and Switzerland as follows: The first they took charge of, is the large City Hospital at Muelhausen (France), where fifteen are yet laboring. No less than 1443 sick were nursed last year in this institution. 2. The care of the poor and sick in the same city. This is divided into six districts; in each there is a deaconess among this hitherto neglected class. They are nursed in their own dwellings, but the wretched condition of many of these has led to the purchase of a large house, which is now being fitted up for a private hospital and a home for the sisters. 3. The Citizens' Hospital in Neufchatel (Switzerland), where from three to four hundred sick are annually nursed, and many thousands of indigent strangers are fed during the year. 4. A second Hospital in the same place, with five hundred patients annually, who have not the right of citizens in the first institution. 5. The Training School for Christian domestics in Colmar (France). 6. The Hospital, and charge of the indigent sick in their dwellings, at the same place. 7. The care of the sick and poor in the Lutheran congregation of Illzcab. 8. The Protestant Hospital at Gebweiler (France). This fine institution is the charitable foundation of a wealthy family, whose heart God has touched with compassion for the suffering. 9. The Hospital at Chenal (France), and the care of the sick and poor in the Lutheran congregation. Here, likewise, a devout family have manifested their interest in this work by the erection of a beautiful hospital, with the most ample and comfortable arrangements for the care of the patients. 10. The Citizens' Hospital at Montbeliard (France), where enlarged accommodations are being provided for the sick. 11. The Protestant Hospital at Rappoltsweiler, in connexion with the care of the indigent sick in their dwellings.

The proofs which these abstracts furnish of the prosperity and great usefulness of this Order of Christian women is well worthy of attention. It educates to usefulness in the care of the sick, and in deeds of charity, a class of qualified women who are moved by the highest moral impulses. Of the natural adaptation of the other sex to the care of the sick there is no question, and when we add to this qualification a profound religious conviction of duty, we find concentrated in the individual the true requisites for great usefulness in all charitable offices. Institutions devoted to the culture of these virtues, and to rendering them susceptible of application in practice, deserve the encouragement and support of every Christian community.

We are glad to learn that these institutions are multiplying in widely different parts of the world. They should be able to extend their good influences to every city, and every town where objects of charity exist. In this country we have great need of them, especially at this time, when our immense military hospitals are requiring the highest degree of skilled nursing. We are aware of but a single Institution of Deaconesses in this country. This is located in Pittsburg, and was founded about fourteen years ago. It has furnished, under the Directorship of the Rev. Mr. Passavant, many first class nurses to our military hospitals. Had these institutions been formed in all Protestant churches, we should have now had a full supply of well trained nurses. The editor of the paper above quoted very truthfully remarks: "What scores of Hospitals for the sick, Homes for the fatherless, Retreats for the aged, Refuges for the fallen, and Schools for the neglected, might we not have over this goodly land! What healing and comfort might we not bring to the wounded and languishing in our army, with such trained and disciplined nurses! Indeed, there is no limit to the good which might be done by such an association, laboring in the spirit of our evangelical faith, and after the manner of the primitive deaconesses! But will this ever be?"

WEEK.

The London *Lancet* makes the following comments upon the Report of the Boston Society, "on the alleged dangers which accompany the inhalation of sulphuric ether."

"We have not the least doubt but that the Boston Committee has believed itself justified in coming to this decision. We, upon the contrary, think it has mystified itself in a maze of special pleading and assumption. The same desire

to seek for a more recondite cause of death than that by ether applied to the fatal cases from chloroform, would equally acquit this agent also, and explain away half of its alleged mortality. The details of many of the cases given in the Report are, no doubt, of such a kind as to show that the inhalation of ether was probably not unavoidably and unquestionably the cause of death, unhelped by contingent circumstances. But may not the same thing be said of many of the recorded deaths from chloroform? Further, the perusal of other cases cannot but lead the unprejudiced mind to think that to the ether, and the ether alone, is the fatal event to be attributed. Only let the word *chloroform* be substituted for *ether* in these instances, and the Boston Reporters would not have much hesitation in assigning the cause of death. We do not think, then, that our American *confrères* have by any means proved the perfect innocuousness of ether. They have published, however, a very interesting Report."

The *Med. Times & Gaz.* has the following note:—

"No one can read the Report upon which the above conclusions are founded, without being struck with its partisanship. 'Ether and nothing but ether' has evidently become a Bostonian maxim which must be maintained at all hazards. We were not aware of the increasing conviction in its favor which the Reporters tell us is spreading in Europe. Fortunately, as an antidote to the exclusiveness of their conclusions, they have appended abstracts of the forty or fifty alleged deaths from the employment of ether; and certainly no one can peruse these without feeling convinced that in several of them the charge is substantiated. These may be few; but when we consider the fact that the use of ether is well-nigh abandoned, while chloroform is annually employed in thousands on thousands of cases throughout entire Europe, the disproportion of resulting accident is not so great; and in neither case is it greater than appertains in any other powerful article of the Materia Medica."

—

The following are the views of the representative of French Surgery on the resection of the head of the femur, as given by a correspondent of the *Lancet:*

M. Velpeau has taken up the cudgels on behalf of French surgery, and on Tuesday last at the Academy of Medicine undertook to exculpate the Parisian school from the charge of having either ignored or neglected the operation of hip-joint resection. So far, indeed, was the speaker carried by his patriotic zeal, that he actually made out a case of priority in favor of France, and asserted that many years ago the subject was discussed in this country, and *that* before it had been even thought of elsewhere. "If," added M. Velpeau, "we do not often resort to this surgical expedient, the reason most probably is, that we cure more of those affections to which it is applicable than our foreign brethren. One undeniable fact is, that internal measures and medical treatment with us form a prominent part of the curative system; and to a neglect of these points by the surgeons of other countries may be attributed the necessity for this operation. The English surgeons for the most part have no medical degree, and, being less of physicians than we are, are consequently more disposed to adopt exclusively surgical measures . . . . . In dealing with the question of risk to the patient in the performance of this resection, I must remark that on such occasions justice is very rarely rendered to the surgeon, the dangers of the operation being so invariably confounded with those of the malady. Considered by itself, this operation is neither dangerous nor very difficult; and if we perform it less than our neighbors, the fact has been attributable to our having had less occasion for it." M. Velpeau terminated by hinting that there might also exist some difference between the English and French constitution, and stated it as his decided opinion that there were some operations which succeed better in one country than in another. His conclusion was as follows: "I should not think of resorting to disarticulation until the life of my patient was menaced by the progress of suppuration, and until I felt satisfied of the existence of extensive necrosis; and before commencing the operation I should require the assurance of a physician that no internal complications existed to counterindicate its performance or compromise its result: with these reserves, I admit the propriety of the operation."

—

Three of the Medical Officers of the French armed vessels now visiting our port (Dr. Mauger, Chief, and two of his colleagues), visited the New York Hospital on Monday the 23d ult., and were received by the attending physicians and surgeons. After going through the principal wards of the central and south buildings, a number of medical and surgical cases attracted the particular attention of the visitors, and elicited remarks showing the lively interest they took in the methods of treatment employed, some of which were new to them. The method of heating, ventilation, the buildings, and the cleanly condition of every part of the institution, called forth expressions of high commendation. The pathological cabinet was then inspected; after which the company convened in the library-room, where an ample collation was spread.

Members of the Board of Governors, the Consulting Physicians and Surgeons, and other invited members of the profession, joined the company, and participated in the entertainment. Dr. A. H. Stevens presided, and prefaced the proceedings with an appropriate address. Dr. Buck, the Senior Attending Surgeon, on behalf of his colleagues, then made an address to the guests in French, of which the following is a translation:—

"Gentlemen and Honored Colleagues—The Physicians and Surgeons of the New York Hospital esteem themselves happy to have this opportunity of entertaining such worthy representatives of the medical corps of the French navy. Numerous historical recollections tend to strengthen the bonds which unite our respective nations. Several of our own number have had the privilege of visiting your metropolis and availing themselves of its immense resources for medical education. The remembrance of these advantages is ever present and agreeable. Gathered to-day within these walls where the most brilliant triumphs of American surgery have been achieved, we beg leave to express to you our sentiments of gratitude and consideration.

"It was here, gentlemen, that our eminent Dr. Mott, in 1819, astonished the scientific world by the ligature of the arteria innominata for the first time. It was here, too, that our regretted Rodgers, in 1845, applied for the first and only time a ligature to the left subclavian artery on the inner side of the scaleni muscles; an operation declared impracticable by distinguished surgical authorities, and which the renowned Sir Astley Cooper attempted, but was obliged to abandon. Accept, gentlemen, our cordial welcome, and the assurance of our sincere fellowship."

Dr. Mauger replied, that he and his colleagues were deeply sensible of the honor conferred upon them by this friendly reception. They had been exceedingly gratified with what they had seen of the hospital. They should retain a most agreeable recollection of their visit, and would delight to have an opportunity of reciprocating these civilities on their own shores. Other gentlemen made brief and appropriate remarks suitable to the occasion. After partaking of the ample collation, the company broke up, every one appearing highly gratified with the agreeable entertainment.

—

Germany has its National Medical Congress. Its organization resembles the Association in this country, and like

the latter, is migratory in its character. Its last session was recently held at Speyer, and seems to have been very fully attended. It is divided into Sections, the Medical being as follows:—The Physico-Chemical; the Medical; the Gynæcological; the Surgical, and the Anatomical and Physiological. In the discussions before these Sections we find the well known names of Virchow, Schönbein, Czermak, Roser, and others. The Society was received by the town authorities with many compliments, and its Session in that city seems to have been regarded by the people as an honor.

Reviews.

A Report to the Secretary of War of the Operations of the Sanitary Commission, and upon the Sanitary Condition of the Volunteer Army, its Medical Staff, Hospitals, and Hospital Supplies. December, 1861. Washington, D. C.: 1861. 8vo., pp. 107.

The columns of this journal have borne ample testimony to the appreciation and friendly interest that is entertained by us and the medical profession generally in the objects and efforts of the Sanitary Commission for the Army. We have endeavored to preserve in our own minds a vivid and just estimation of the peculiar character and unprecedented value of the lives and health of the hosts of patriotic soldiers that are swelling the *corps d'armées* from the Chesapeake to Kansas, to the unparalleled aggregate of nearly a million of citizen soldiery. The history of modern warfare has left the estimates for disability from disease, as given in the writings of Sir John Pringle, but little more creditable to army hygiene than were those a century ago. From twenty to twenty-five per cent. of those who have escaped the wounds of battles, have almost inevitably been left sick in the hospitals at the end of campaigns. The average rate of sickness in Wellington's peninsular campaigns was twenty-one per cent., constantly sick, of the total strength; and in the Crimean war the rate reached the enormous average of 26.6 per cent., while the death rate went up to twenty-three per cent. of the total strength, three per cent. being from wounds and casualties of war, and twenty per cent. from *disease*.

In view of such unerring and terribly significant records it would be difficult to overrate the importance of the work undertaken by the United States' Sanitary Commission. With eager interest have we noted and perused the documents and special reports issued by the Commission, until now, when the *thirty-sixth* has reached us; some of these papers being advisory and suggestive, others being for inquiry or instruction. At last, at the close of the year and of the first seven months' work, an elaborate and able Report has been presented to the Secretary of War. It is a document worthy the enlightened philanthropy and patriotism of the noble men composing the Commission. The following topics are specifically treated of in this Report:

"Organization and Duties. Preliminary Survey. Financial Basis. Advice. Inquiry. Condition of the Volunteer Army; Time of Recruiting. Nativity. Age, Inspection of Recruits, Situation of Camps, Water, Occupation of Camp Sites, Natural Drainage, Artificial Drainage, Camp Arrangement, Tent Accommodation, Ventilation, Tents, Flooring, Privies, Disposition of Offal, Stables, Camp Police in general, Clothing, Cleanliness. Food, Company Funds, Hospital Fund, Cooking, Sutlers, Drunkenness, Discipline, Recreations, Regimental Bands, Remittances of Pay, Qualifications of Surgeons, Camp Hospitals, Classification of Hospitals—Table, Resumé of Sanitary Condition of Regiments—Table. Mortality, Diseases and Casualties; Extent and general character of diseases, Quinine as a prophylactic. Disposition of the Sick—Table; Prevalent Diseases, Diseases and Casualties of the Army Statistically Classified—Table, Number of Diseases and Casualties of each class and order to 1000 treated. Tendencies of Disease; Typhus, Measles and Small-pox. Military Hospitals; Defect in Present Hospital Arrangements, Relation between General and Regimental Hospitals, Technical Difficulties in the Hospital System. Medical and Surgical Service of the Army; Regular Service, Volunteer Service, Transportation. Volunteer Hospital and other Supplies; Depots of the Commission, Freight, Amount of Supplies Distribution, System of Distribution, Reserved Stock of Supplies, Insufficiency of Government Reserves. Supplies for men in the Field. Special Relief to Volunteers in Irregular Circumstances. Distribution of Advisory Documents. Record of Burials. Disbursements. Members of the Commission. Importance of Military Hygiene. Appendix: I. Officers of the Commission. II. Staff of Inspection. III. Example. IV. Notes on Bull Run. V. Ambulance. VI. Volunteer Army Supplies."

As this important Report may not be placed within reach of most of our readers, we will make the following interrupted quotations from its various chapters:—

Duties.—"The Commission has, from the first, fully recognised the fact that its office was purely auxiliary and advisory, and that it was created solely to give what voluntary aid it could to the Department and the Medical Bureau, in meeting the pressure of a great and unexpected demand on their resources.

"The Medical Bureau especially, organized with reference to the wants of an army of only a few thousand men, seemed likely to be most seriously embarrassed in its operations, when called on to provide for a newly levied force of several hundred thousand, especially as both the officers and men of these hastily assembled regiments were mostly without experience, and required immediate and extraordinary instruction and supervision to save them from the consequences of exposure, malaria, unwholesome food, and other perils of camp life.

"The Commission met for the first time at Washington, on the 12th June last, and proceeded to organize and to settle, so far as was then possible, the general scheme of its operations.

Advice.—"For this purpose the Commission proceeded, as speedily as possible, to secure the services of a body of physicians specially fitted for the required duty, and to send them into the field at various points from Fortress Monroe to St. Louis. * * * Fourteen well qualified physicians are now employed by the Commission, each having a defined portion of the army under his observation. Six other gentlemen, each possessed of special acquirements, are engaged on special duties."

"Among the subjects to which their attention is especially directed, and on which they are required to make detailed written reports, are the quality of rations and of water, the method of camp cooking, the ventilation of tents and quarters, the drainage of the camp, the healthfulness of its site, the administration of the hospital and the sufficiency of its supplies, the police of the camp, the quality of the tents and of the clothing of the men, the material used for tent flooring, if any, etc., etc. * * * The effect of the advice given by the Inspectors of the Commission is found not to be confined to the particular camp visited, or to the officers with whom they converse. The example of one regiment in reforming abuses and enforcing sanitary laws is very generally followed by others near it, and an emulation is excited among company and regimental officers, the beneficial effects of which have been noticed in many cases where an ill-regulated regiment has been transferred to the neighborhood of a cleanly, well-policed, thoroughly drained, and saluhrious camp. * * *

Inquiry.—"After the inspection of each camp or post, the inspector is required to make an elaborate report upon its condition. This report consists mainly of written answers in the most exact and concise form to a series of printed questions, one hundred and eighty in number, covering every generally important point connected with the sanitary condition of the army.

"More than four hundred of these reports have been received by the Commission. Their results are carefully tabulated, and suitable digests prepared by an accomplished actuary. The Commission is not without hope, if it should be enabled to continue its operations, eventually to lay before the country a body of military medical statistics more complete, searching, and trustworthy than any now in existence."

The following is an imperfect abstract of some of the results of the work in the field of inquiry, based upon accurate and repeated inspection returns in two hundred regiments:—

Average Time of Recruiting—6 weeks; *Nativity*—76¼ per cent. are native Americans, Germans, 6½, Irish, 5½; *Average Age*—A little below 25 years, more than half are under 23, and the number at 20 is twice that at 25 years; *Inspection at Enlistment*.—Not inspected in 58 per cent., in 9 per cent. there had been thorough re-inspection. A careful examination of the causes officially assigned for the discharge of 1,620 men from the army of the Potomac, as unfit for service, during the month of October, leads to the startling conclusion that fully 53 per cent. of the whole number were thus discharged on account of disabilities that existed at and before their enlistment, and which any intelligent surgeon ought to have discovered on their inspection as recruits. This conclusion is sustained by information from other sources. These men had each, probably, cost the Government at least one hundred dollars for his pay, rations, clothing, transportation, medicines, etc., making an aggregate of over eighty thousand dollars absolutely wasted on men who ought never to have been enlisted.

Situation of Camps.—* * * The regimental surgeon has seldom been consulted on the subject. * * * *Period of Occupation*—21 days. * * * *Tents*.—58 per cent. are in wedge-tents; 10 per cent. in wall-tents; 7 with the bell, and 19 with the Sibley (conical). * * * *Cleanliness*.—In 80 per cent. daily washing and personal cleanliness was attended to by authority, and shirts washed once a week.

Food.—"Everywhere abundant, but with a lack of fresh vegetables." *Discipline, etc*.—Average number of men in guard-house daily, two and three-fifths in each regiment. *Recreations*.—One-fifth of the regiments have libraries, 42 have athletic sports, 143 have bands of music. * * *

Camp Hospitals.—"The arrangement, equipment, and supplies of the Regimental Hospitals are reported to have been in one hundred and five (105) of the regiments, good; fifty-two (52) indifferent or tolerable; twenty-six (26) bad.

"In thirteen (13) regiments, no hospital whatever had been organized. As to four, there is no report.

"The following table shows the aggregate strength of the two hundred regiments under consideration. The numbers sick in hospitals and in quarters; the proportion sick in hospitals and quarters to every 1000 strength, and to every 1000 cases on the sick list:

Of 200 regiments last visited previous to November, 1861.	Aggregate numbers.	Present strength on sick list.	
		Proportion to every 1,000.	Proportion to every 1,000.
Strength when mustered	176,639		
Strength when inspected	176,042		
On sick list at time of inspection	12,841	73	1,000
Sick in General Hospital	2,756	16	215
" Regimental Hospital	2,973	17	231
" Quarters	7,112	40	654

"The average number of men constantly sick in the regiments from several of the States respectively, is nearly as follows:

New York.	(per thousand strong,)	. . .	55
Pennsylvania,	" "	. . .	57
Massachusetts,	" "	. . .	52
Connecticut,	" "	. . .	49
Vermont,	" "	. . .	88
Maine,	" "	. . .	124
New Jersey,	" "	. . .	36
Wisconsin,	" "	. . .	76
Indiana,	" "	. . .	42
Michigan,	" "	. . .	76
Illinois,	" "	. . .	156
Ohio,	" "	. . .	192

The average length of time lost for active duty, in each case of sickness reported, has been a little more than five days (5.18).

"It has happened in more than one instance that upon an order to advance against the enemy being given, every man of a regiment then on the sick list immediately reported himself well, was discharged, and shouldered his musket in the line of battle. It is probable that at least one-half those returned as sick by the surgeons of volunteers would do the same, under similar circumstances; that proportion being excused from duty on account of a cold in the head, severe fatigue, or a slight indigestion.

Mortality.—"The average mortality of the army of the Potomac has been, during the summer, at the rate of 3½ per cent., (allowance being made for those who die after their discharge, from causes connected with army life.) Imperfect data received from the West indicate a considerably larger rate for the whole army; probably it will not be far from 5 per cent. if sweeping epidemics should be escaped."

DISEASES AND CASUALTIES OF THE ARMY STATISTICALLY CLASSIFIED.

Diseases, etc.	Number of Cases Treated.		
	Army of Potomac.	Army of the West.	Aggregate.
All Cases	15,439	12,215	27,654
Specified Cases	15,439	12,087	27,526
(Classes.)			
Zymotic Diseases	9,437	9,228	18,665
Constitutional Diseases	193	77	270
Local Diseases	4,737	2,086	6,823
Developmental Diseases	520	427	947
Violence	552	269	821

At a future time we will present to our readers both the argument and the elaborate statistical tables by which the Commission urges, with masterly cogency, the importance of an improvement in the regulations relating to the medical and sanitary statistics of the army. The subject of educational, departmental, and other improvements needed in the medical service, also requires special notice. The Report boldly enunciates strong convictions upon these points; as it likewise does concerning needed improvements in the organization and management of military hospitals of every class.

Advisory and Scientific Publications.—"The Commission, having enrolled among its associate members many distinguished members of the medical profession throughout the loyal States, has thought it fairly within the scope of its duties to invite them to aid in the protection of the army against disease, by the preparation of papers intended to embody in a brief compass the latest results of medical and surgical science, in regard to various special points of great practical importance, as to which some of our volunteer surgeons, necessarily inexperienced in their new field of army medicine, surgery, and hygiene, and without access to libraries, may need information and advice. The duty of compiling these papers has been confided by the Commission to leading members of the profession in our principal cities; and papers on re-vaccination, on the treatment of camp fever, on dysentery, and on certain surgical operations of importance, but not universally understood, are now completed or in progress. These the Commission proposes to print, and to place in the hands of every member of the medical staff."

Record of Burials.—"The Commission has endeavored to obtain information by which the place of burial of the volunteers who have been killed in battle, or who have died in hospitals, may be established. They have also elaborated a system of records for those dying in hospitals, and of indications of their burial-place, by which their bodies may be identified; which has received approval, and been ordered to be carried out, blanks and tablets for the purpose being furnished to each regimental quartermaster."

Such labors require no comment from us. They have been conceived and are prosecuted in the true spirit and by the most enlightened intelligence of our profession. Their reward is on high. The Report truly states that—

"The one point which controls the Commission is just this: a simple desire and resolute determination to secure for the men who have enlisted in this war that care which it is the will and

duty of the nation to give them. That care is their right, and, in the Government or out of it, it must be given them."

Are our brethren throughout the land fully aware of the purposes and the wants of the Sanitary Commission, and will they see that its operations are not crippled by any lack of material aid? Why should not every physician present its claims to the people of his neighborhood? It is emphatically the medium through which the affectionate hearts and hands at home minister most directly and effectively to the health and comfort of their loved ones in the army, and to the strength of their country's cause. Unless the Government will assume the support and control of this or similar machinery for effectual sanitary surveillance and instruction, we say let the means of the Sanitary Commission be quadrupled.

Correspondence.

OBSEQUIES OF M. SCRIVE.

[To the Editor of the American Medical Times.]

Sir:—M. Scrive, Inspector of the *Service de Santé* of the French army, was buried on the 21st of October last. His remains were followed to the grave by a large number of distinguished men. Three speeches were pronounced over the tomb of that illustrious surgeon. It will, I think, interest medical men, and particularly military surgeons, to read the speech of Baron H. Larrey, which embodies the principal events of Scrive's life. I therefore submit a translation.

Baron Larrey said:—Scrive (Gaspard Léonard), born at Lille, January the 13th, 1815, belonged to an honorable commercial family of that city. Called by taste to the study of medicine, and by vocation to the medical military service, his labors met with encouragement and success. He entered service at seventeen, in 1833, as student in surgery at the Military Hospital of Instruction at Lille, and there obtained the first prize at the competition of 1834. Appointed Under Assistant-Surgeon (Chirurgien Sous-aide) at the same hospital, towards the end of that year, he was transferred to the hospital of Lyons during the epidemic of cholera which raged in the south of France, and spent the following year at the Val-de-Grâce, where he filled the place of preceptor of anatomy. In 1837 he obtained the first rank at the competition for the grade of Assistant Surgeon-Major (Aide-Major), and was sent to the active ambulances of the army of Africa. Attached particularly to the Hospital of Douéra, which formed then a vanguard pass, he gave there the proofs of a surgical skill which presaged for him a brilliant career.

He belonged first to the 7th Light Infantry, then in 1838 he joined the 17th of the line, and in 1840 entered the hospital service. He was first stationed at Strasbourg, having failed in a competition for the chair of Surgical pathology at the Val-de-Grâce. A short time after this, February, 1841, he was successful in a competition for a chair in the Hospitals *d'Instruction*, and was appointed professor at Lille, with the rank of Assistant Surgeon-Major of first class (Aide-Major 1ère class).

In 1844 he was promoted to the rank of Surgeon-Major, second class (Chirurgien-Major, 2ème class), and in 1847 to that of Surgeon-Major, first class, at the same station. The hospitals of instruction were suppressed, and he gave up teaching. In 1851 he entered the Hospital of Valenciennes as *Chef de Service*, and in 1852 he was appointed principal physician of second class (médecin principal) in the hospitals of Oran.

Lastly, M. Scrive was at Mostaganem in 1854, when he had the honor of being appointed head of the medical staff of the French army in the Crimea. The following April he was promoted to the rank of physician in chief of first class (médecin principal de 1ère classe), and two years later to that of physician inspector (médecin inspecteur), as a reward for his excellent services, and his prodigious activity during the whole course of that memorable campaign.

He was doubly and nobly rewarded in the Legion of Honor, for his services. At the end of December, 1854, he was made a *chevalier*, and as early as the month of August, 1855, he was promoted to the rank of officer. At that time he received also the foreign orders of Commander of the Turkish order of Medjidié, of Knight Companion of the Bath (English order), of the Sardinian order of St. Lazare (2d class), and of the Crimean medal of England, showing by his four clasps the active part he had taken to tell the phases of the expedition of our valiant army from the first day of their departure from France, to the last moments of their occupation of the Crimea.

Scrive had already been initiated in Africa to the service of military surgery, first, as assistant-surgeon major of *ambulance*, at the battle of Oued-halley, December, 1839; then in 1840, at the taking of Cherchelle, at the passage of the Col de Téniah, and at the taking of Médéah. He was also with the Seventeenth at the more advanced post of Mitidjah, when the war with the Arabs kept our troops constantly on the alert.

Scrive possessed excellent qualities for the practice of military surgery in the midst of the vicissitudes of war. He was endowed with a strength that could stand the hardest task, with an activity which multiplied efforts, an inventive mind which improvised resources, and that knowledge which appreciates the nature of disease, and the talent which directs and insures the means of remedying it, and the solicitude which provides for successful results.

As Professor of Surgical Pathology and Operative Surgery in the Hospitals of Instruction he had shown great aptitude for teaching, and the advantages of a good method when united to learning and skill. He had worked hard to attain to this proficiency, for he had not yet acquired that vast experience which latter was to complete his learning on the vast field of the Crimea.

Scrive obtained the degree of Doctor of Medicine from the Faculty of Medicine of Paris, in 1837, and was appointed corresponding member of the *Societé de Chirurgie*, towards the end of his career in 1859. He has published several estimable works; and has furnished the Council of Health with useful information on military medicine and surgery.

In his *Relation Medico-Chirurgicale de la Campagne d'Orient*, he tells us in the introduction the difficult condition in which the French army was situated, the distances to be travelled, the obstacles to be overcome, and the diseases to be borne; epidemics more disastrous than all the wounds of the battle-field, dysentery, cholera, scurvy, and above all typhus fever, that destructive scourge of the strongest armies, carrying in its train, and even afar off, contagion and death. * * * * * *

Promoted to the rank of *Inspecteur du Service de Santé*, M. Scrive displayed in the exercise of his functions all the activity, all the zeal he had manifested in his important mission to the East; it is not for us to seek here for the causes of his decline (the most probable being undoubtedly a slow but progressive change in the state of his health). Our colleague became sad, uneasy, dissatisfied, and discouraged without apparent reason, since he had, so young, attained the apogee of his career.

Scrive was tall, of a vigorous constitution, with a bright intellect, and a disposition at the same time gentle and impetuous. He was actuated by the generous sentiments of an upright and honest heart; but he also allowed himself to be led astray by the impulses of too ardent an imagination, or by the illusions of his impressive nature.

Affected with a chronic dysentery, the first attacks of which he had felt in the Crimea, in the midst of that campaign, so long and so painful, our unfortunate colleague had felt, for already more than two years, a deep disturbance in his health; he had even experienced some of

the alarming symptoms of a disease of the liver, and notwithstanding the great moral energy with which he was endowed, had felt much grief at his situation.

Living almost isolated with his family, who surrounded him with the tenderest care, in a country-house at Clamart, where he spent summer and winter, he suffered also at not being any longer able to give a free scope to the inspirations of his active organization, and this suffering must have aggravated his condition.

The death of Scrive has been sudden though anticipated. Prepared long ago by the fatal influences of the Crimea; threatening, two years ago, from a double disease of the intestines and of the liver; more imminent still from a recent pleurisy and a relapse, it was suddenly produced by an affection of the brain, whose origin seems to go back also to that glorious campaign, in which our regretted colleague had generously exhausted all the efforts of his activity to fulfil, to the end, his laborious and painful mission.

The regrets of all our *confrères* will be to the memory of Scrive—a pledge of well deserved sympathy. May I have been the faithful interpreter of their sentiments in this loss. Adieu!

Yours, etc.,

D. F. C. Deslandes, M.D.

ARMY MEDICAL STATISTICS.

[To the Editor of the American Medical Times.]

Sir:—In the abstract of Senator Wilson's bill relating to the Army Medical Staff, as given in your editorial columns, it does not appear that any special provision is to be made for the better utilization of the medical statistics of the army. The absence of such a provision would appear to be a defect, inasmuch as statistical inquiry is an essential basis for improvements and reforms—be they economical or humane.

The practical importance of accurate and systematic statistical inquiry, records, and reports, in the medical department of a large army, is too well understood to require new arguments in favor of insuring the proper performance of such duties by skilled hands specially designated for the work. The valuable service that the Army Medical Bureau has performed in the voluntary preparation of its three elaborate "Reports on the Sickness and Mortality in the Army," present honorable testimony to the willingness and desire of the army staff to contribute the results of their observations and experience to the advancement of medical science, and the promotion of military and hygienic economy. But while those valuable reports bear such testimony to the zeal of the staff and to the expert ability of Drs. Coolidge, Wotherspoon, and Forry, who, at great disadvantage, elaborated them, they also afford internal evidence of the want of a system of inquiry and returns commensurate with the progress and requirements of medical knowledge, and adequate to meet every demand that may properly be made upon medicine and hygiene by both the economic and strategic interests of the army. The introduction of needed improvements in the system of records and reports, and the establishment of a special statistical department in the medical bureau, with the ablest medical statistician in the army in supervision, would produce results of great practical value. At the suggestion of Sir Sidney Herbert's Commission of Sanitary Inquiry, the British Government has established a statistical branch in the Director-General's office at London, and a special committee, consisting of Dr. Farr, Col. Tulloch, and Sir Sidney Herbert, have reported an improved system for the army medical reports and statistical records. By that system, "the reports will present an exact and comprehensive view of the army. They will show, *week by week*, the number of effective men, and the number ineffective from each particular cause. They will supply the means of determining methodically the health of the army in peace or in war." And, as the committee has truly asserted, "they will every year contain new contributions to the science of health." That committee also make the following statement:

"If the statistical reports help the Secretary of State for War to reduce largely the sickness of the army in peace and in war, they will, it is plain, save thousands of pounds annually in the estimates. At the same time they will effect a still more important saving; for *they will save the lives of the soldiers*. If soldiers die in battle by hundreds, they die of disease, in hospitals, by thousands. * * *

"Under the system we propose, medical officers will be able to record their observations with increased accuracy, to classify phenomena and to discuss the relation of every order of facts. A good system of army reports will enable the Army Medical Department to develop all its energies, and to distinguish itself by sanitary discoveries, which will increase the efficiency of Her Majesty's army, advance science, and be beneficial to mankind."

This noble view of the utility of medical statistics and their systematic analysis and official presentation applies as truly to the American as to the British army. We express no doubt that the Medical Bureau does all in its power to make the reports and statistical returns of the Army Medical Department permanently useful; but it is no secret that the Bureau, as at present constituted by law, is overwhelmed with its merely clerical and administrative duties. Its constantly accumulating and imperfect statistics and reports can only be studied and utilized at distant and uncertain intervals.

With some fourteen hundred medical officers in the Federal army, and with a prospect of greatly increased importance and responsibility in that branch of professional service, the highest requirements of medical knowledge should be promptly provided for by the harmonious action of the Government and the profession. Animated by principles of patriotism and humanity, such harmonious action would very speedily provide for every needed improvement in the medical service; there would be an adequate division of labor, and the mooted question of *selection* versus *succession* to the purely administrative offices of the department would be quickly and satisfactorily adjusted.

Phila., Dec. 26, 1861. J. C.

Army Medical Intelligence.

HEALTH OF TROOPS AT FORTRESS MONROE.

[Army Correspondence of the American Medical Times.]

Fortress Monroe, Va., Dec. 14, 1861.

The following statistics from the reports of the medical officers of this division of the army, for the months of October and November, are at your disposal.

There were reported on the last day of October, 9821 enlisted men, and 408 officers. There were during the month, 3982 cases under medical treatment; 96 of whom were sent to the General Hospital, 2998 were returned to duty, 21 received a furlough, 34 were discharged from service, 1 deserted, and there were 22 deaths. There remained sick 285, and 535 were convalescent. The principal diseases were: of fevers, 28 cases of congestive, 24 of continued, 464 of intermittent, 326 of remittent, 3 of typhus, and 61 of typhoid; there were 7 cases of erysipelas, 7 of rubeola, 11 of cholera morbus, 119 of colic, 109 of constipation, 552 of diarrhœa, 75 of dysentery, 7 of gastritis, 1 of hæmatemesis, 35 of tonsillitis, 99 of bronchitis, 179 of catarrh, 4 of hæmoptysis, 2 of laryngitis, 15 of phthisis pulmonalis, 16 of pleuritis, 13 of pneumonia, 1 of carditis, 1 of endocarditis, 2 of pericarditis, 49 of cephalalgia, 1 of chorea, 4 of delirium tremens, 5 of epilepsy, 4 of mania, 1 of meningitis, 9 of neuralgia, 1 of paralysis, 7 of syphilitic bubo, 53 of gonorrhœa, 4 of nephritis, 9 of orchitis, 9 of primary syphilis, 20 of secondary syphilis, 1 of hydrocele, 26 of lumbago, 118 of acute rheumatism, 56 of chronic

rheumatism, 16 of abscess, 5 of paronychia, 14 of phlegmon, 27 of ulcer, 25 of contusion, 1 of fracture, 3 of hernia, 3 of luxation, 24 of sub-luxation, 40 cases of incised wound, 6 of contused and lacerated, and 45 of gunshot, 24 cases of ophthalmia, 14 of otitis, 2 of simple bubo, 22 of hæmorrhoids, 1 of nostalgia, and 1 of scorbutus.

The deaths, 6 of which occurred at the General Hospital, were from the following diseases: 8 of typhoid fever, 3 of typhus fever, 3 of pneumonia, 2 of dysentery, 1 of nephritis, 1 of pleuritis with effusion, 1 of diphtheria, 1 of uræmia, 1 of perforation of intestine, and 1 was shot by accident.

From the register I take the following: there have been during the month 4 days of rain, 11 cloudy, and 20 fair. The mean temperature for the month was 67°, the maximum 86°, the minimum 55°.

On the last day of November the following medical officers were in charge in this Division: John M. Cuyler, U.S.A., Medical Director, etc., Fortress Monroe; R. B. McCay, Brigade Surgeon, Purveying Department; Reed B. Bonticon, Brigade Surgeon, General Hospital; John W. Hunt, 10th Regt. N. Y. Vols., garrisoning Fortress Monroe; R. K. Browne, Brigade Surgeon, Camp Hamilton; D. W. Maull, 1st Regt. Del. Vols., Geo. S. Potter, 45th Regt. Pa. Vols., Johnson Clark, Union Coast Guard, Julius Hausen, 20th Regt. N. Y. Vols., C. C. Jewett, 16th Regt. Mass. Vols., Orpheus Everts, 20th Regt. Ind. Vols., Camp Hamilton; Josiah Curtis, Brigade Surgeon, Camp Butler, Newport News; John Howe, 1st Regt. N. Y. Vols., Lee Roy McLean, 2d Regt. N. Y. Vols., Franz R. Staehl, 7th Regt. N. Y. Vols., John M. Forshie, 11th Regt. N. Y. Vols., W. H. Bradley, Mass. Battallion, Camp Butler, Newport News; T. H. Bache, Brigade Surgeon, 1st Regt. U. S. Artillery, Co. C., Fort Hatteras, N. C.; Geo. H. Humphrey, 9th Regt. N. Y. Vols., Camp Wool, Hatteras; D. Minis, 48th Regt. Pa. Vols., Camp Clark, Hatteras.

There were reported 12,213 enlisted men, and 498 officers. There were 4009 cases under treatment during the month; of these 166 were sent to the General Hospital, 2820 were returned to duty, 19 received furlough, 75 were discharged from service, 1 deserted, and 38 died. There remained sick 375, and 519 convalescent. The diseases were, of fevers, 42 cases of continued, 314 of intermittent, 252 of remittent, 73 of typhoid, 23 of typhus; there were 7 cases of erysipelas, 81 of rubeola, 1 of variola, 9 of cholera morbus, 23 of colic, 141 of constipation, 365 of diarrhœa, 36 of dysentery, 29 of gastritis, 1 of hæmatemesis, 18 of hepatitis, 21 of tonsillitis, 135 of bronchitis, 193 of catarrh, 5 of laryngitis, 5 of hæmoptysis, 12 of phthisis pulmonalis, 7 of pleuritis, 19 of pneumonia, 17 of cephalalgia, 1 of delirium tremens, 1 of mania, 4 of meningitis, 14 of neuralgia, 1 of paralysis, 10 of syphilitic bubo, 43 of gonorrhœa, 2 of nephritis, 15 of orchitis, 14 of primary syphilis, 8 of secondary syphilis, 2 of hydrocele, 14 of lumbago, 153 of acute rheumatism, 30 of chronic rheumatism, 25 of abscess, 2 of carbuncle, 4 of paronychia, 14 of phlegmon, 46 of ulcers, 29 of contusion, 5 of fracture, 17 of hernia, 1 of luxation, 16 of sub-luxation, 54 of incised wound, 3 of contused and laccrated wound, 3 of punctured wound, 13 of gunshot wound, 3 of amaurosis, 23 of ophthalmia, 6 of otalgia, 2 of simple bubo, 8 of hæmorrhoids, 1 of necrosis, 2 of prolapsus ani, and 2 of scorbutus. The remaining were of no interest. Of the deaths, 13 died at the General Hospital. The diseases were, from typhoid fever, 16; meningitis, 4; phthisis pulmonalis, 4; pneumonia, 2; bronchitis, 1; laryngitis, 1; typhoid pneumonia, 1; gunshot wound, 1; remittent fever, 1; dysentery, 1. There were 3 drowned, 2 shot by accident, and 1 died from injuries received by being run over. During the month there were 3 rainy days, 8 cloudy, and 22 fair. The mean temperature for the month was 53½°, the maximum 70°, the minimum 38°.

J. W. Hunt,
Surgeon 10th Regt. N. Y. Vols.

Medical News.

Death of Stephen S. Griswold, M.D.—At a special meeting of the N. Y. City Library Association held at the Library Rooms, No. 5 Abingdon Square, on the evening of December 24, 1861, Alfred C. Hoe, Chas. M. Hall, and J. W. Griffiths, the Commitee to report resolutions in regard to the death of Doctor Griswold, reported the following, which were unanimously adopted:

Resolved, That the members of this Association have heard with sadness and deep regret that Doctor Stephen S. Griswold, the First President of the Association, is dead, having died in Castle Pinckney, in Charleston harbor, a prisoner held by rebels engaged in tearing down the constitution and laws which the deceased spent his last breath in maintaining; by rebels whose names will be execrated, when his will be entwined with those sadly sweet memories which cluster round the name of him who has died for his country.

Resolved, That this Association is deeply indebted to the deceased for the prosperity it has enjoyed. As its first President, and at the time of his death a Director, he ever exhibited the most untiring energy and preseverance in the performance of his dutics, and for the promotion of its interests.

Resolved, That the affliction which we feel in the death of the deccased is chastened by our memory of his character, and by our knowledge that he was a man of entire integrity, of unflinching courage, of perfect truth, and one, therefore, who adorned all the relations of life, and enjoyed the esteem and regard which conduct so regulated is sure to win.

Resolved, That the proof of these characteristics was seen when on the battle-field of Manassas. Regardless of his own safety, he nobly stood by the dying and the dead, and thus performing his duty was taken prisoner, and again seen, when repeatedly offered to be released on parole, he refusecd, preferring to remain a prisoner and to die rather than to be under the slightest obligation to the encmies of his country.

Resolved, That the members of this Association most deeply sympathize with the widow of the deceased in her great affliction, and hope that, even in her moments of deepest sadness, she may be consoled by reflecting that her deceased husband was her country's son, and he died for it.

Resolved, That these resolutions be entered upon the minutes, a copy be delivered to the widow of the deceased, and his portrait in our rooms be hung with crape

Medical Men in Brazil.—"L'Union Médicale" states, in an article on foreign medical events, that in Brazil there are 13 medical men in the Chamber of Representatives out of 120 members, and 2 in the Senate out of 50 senators. The same journal mentions an unfortunate occurrence at Dantzic. It appears that Dr. Stich, chief physician of the hospital there, was tried before a criminal court for having made a wrong diagnosis, the accusation being brought by the Royal College of Physicians of Königsberg. Dr. Stich was simply fined, and the payment was remitted on the occasion of the King's coronation.—*Lancet.*

Health of New York for the Week ending December 28th.—According to the City Inspector's report, there were 359 deaths in the city during the past week—a decrease of 70 as compared with the mortality of the week previous, and three more than occurred during the corresponding week last year. The recapitulation table gives 5 deaths of alcoholism, 4 of diseases of the bones, joints, etc.; 62 of the brain and nerves, 4 of the generative organs, 18 of the heart and blood vessels, 132 of the lungs, throat, etc.; 2 of old age, 46 of diseases of the skin and eruptive fevers, 7 premature births, 38 of diseases of the stomach, bowels, and other digestive organs; 25 of uncertain seat and general fevers, 3 of diseases of the urinary organs, and 13 from violent causes.

TO CORRESPONDENTS.

I. T. B. (U.S.A., Augusta, Ky.)—Acceptable, and will shortly appear.

MEDICAL DIARY OF THE WEEK.

Monday, Jan. 6.	New York Hospital, Dr. Peters, half-past 1 P.M. Bellevue Hospital, Dr. Thomas, half-past 1 P.M.
Tuesday, Jan. 7.	New York Hospital, Dr. Watson, half-past 1 P.M. Bellevue Hospital, Dr. Loomis, half-past 1 P.M. Opthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
Wednesday, Jan. 8.	New York Hospital, Dr. Cock, half-past 1 P.M. Bellevue Hospital. Dr. Sayre, Is. Hos., half-past 1 P.M. New York Pathological Society, half-past 7 P.M.
Thursday, Jan. 9.	New York Hospital, Dr. Peters, half-past 1 P.M. Bellevue Hospital, Dr. Taylor, half-past 1 P.M. Opthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
Friday, Jan. 10.	New York Hospital, Dr. Watson, half-past 1 P.M. Bellevue Hospital. Dr. Flint, half-past 1 P.M. Eye Infirmary, Dr. Noyes, half-past 1 P.M.
Saturday, Jan. 11.	New York Hospital, Dr. Cock, half-past 1 P.M. Bellevue Hospital, Dr. Wood's Clinic, 1 P.M. Opthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Rensselaer Polytechnic Institute, Troy, N. Y.—The seventy-sixth semi-annual session of this Institution for instruction in the Mathematical, Physical, and Natural Sciences, will commence Feb. 19th, 1862. A full course in Military Science is now in progress.

Further information, with the Annual Register, can be obtained of Prof. Charles Drowne, Director.

To Physicians.—Timolat's Old Established SULPHUR AND VAPOR BATHS. Introduced in 1820 by L. J. Timolat, from Paris, at No. 1 Carroll Place, Bleecker street, corner of Laurens street, New York. Given daily by

A. L. TIMOLAT & CO.

Sent Free by Mail on Receipt of Price.

General and Descriptive Anatomy of the Domestic Animals, by John Gamgee and James Law, Professors of Veterinary Surgery. 8vo. London, 1861. $3.75.

Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

A Manual of the Dissection of the Human Body, by Luther Holden, F.R.C.S. 2d edition, illustrated with numerous wood engravings. 8vo. London. 1861. $5.00.

Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

A Manual of Minor Surgery and Bandaging, for the use of House Surgeons, Dressers, and Junior Practitioners, by Christopher Heath, F.R.C.S. Illustrated by engravings on wood. 12mo. London, 1861. $1.55.

Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Medical Climatology; or, a Topographical and Meteorological Description of the Localities resorted to in Winter and Summer by invalids of various classes, both at home and abroad, by R. E. Scoresby-Jackson, M.D. 8vo. London, 1862. $3.75.

Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Our Domestic Animals in Health and Disease. 1st division, Organs of Digestion: their Functions and Disorders, by John Gamgee, with numerous illustrations. 12mo. London, 1861. $1.87.

Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Text-Book on General Physiology

for the use of schools.

A KNOWLEDGE OF LIVING THINGS WITH THE LAWS OF THEIR EXISTENCE. By A. N. Bell, A.M., M.D. One handsome volume of 318 pages, 12mo., illustrated by sixty wood engravings and two colored plates. Price One Dollar.

N.B.—The work was originally published at $1.50. It is *reduced in price* so that it may compete more favorably with other Text-Books.

Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

A Treatise on Diseases of the Joints, by Richard Barwell. 8vo. London, 1861. $3.75.

Bailliere Brothers, 440 Broadway.

BOOKS

ON

MILITARY SURGERY,

FOR SALE BY

BAILLIERE BROTHERS

440 BROADWAY.

Sent Free by Mail on Receipt of the Price.

Notes on the Surgery of the War in the Crimea, with Remarks on the Treatment of Gunshot Wounds. By George H. B. MacLeod, M.D. Philadelphia, 1861. $1.50.

Armand, Histoire Medico-Chirurgicale de la Guerre de Crimée. 8vo. Paris. $1.85

Baudens.—La Guerre de Crimee, les Campements, les abris, les ambulances, les hopitaux, &c., &c. Second edition, 12mo. Paris, 1858. $1.

Begin.—Etudes sur le service de sante militaire en France, son passe, son present, son avenir. 8vo. Paris, 1849. $1.25.

Bertheraud.—Campagne d'Italie de 1859. Lettres Medico-Chirurgicales écrites du Grand-Quartier général de l'armée. 12mo. Paris, 1860. $1.00.

Boudin.—Resumes des dispositions legales et reglementaires qui president aux operations medicales du recrutement, de la reforme et de la retraite dans l'armée de terre. 8vo. Paris. 50 cts.

Boudin.—Systeme des Ambulances des Armées Francaises et Anglaises. 8vo. Paris. 87 cts.

Boudin.—Souvenirs de la Campagne d' Italie. 8vo. Paris. 75 cts.

Gross, S. D.—A Manual of Military SURGERY; or, Hints on the Emergencies of Field, Camp, and Hospital Practice. 24mo. Philadelphia. 50 cents.

Guthrie.—Commentaries on the Surgery of the War in Portugal, Spain, France, and the Netherlands. With Additions relating to the War in the Crimea. 8vo. London. $4.65.

Hamilton, F. H.—A Practical Treatise on Military Surgery. Fully illustrated. 8vo. New York: 1861. $2.

On Fractures of Bones and Resection in Gunshot Injuries. By Dr. Louis Stromeyer. 8vo. London. $1.87.

Outlines of Military Surgery. By Sir George Ballingall, M.D. 5th edition, 8vo. London. Price $4.00.

Saurel.—Traite de Chirurgie Navale, suivi d'un resumé de Leçons sur le service chirurgical de la flotte, par le Dr. J. Rochard. 8vo. Paris, 1861. $2.10.

Tripler & Blackman.—Hand-Book for the Military Surgeon. 12mo. Cincinnati. $1.

Warlomont. L'Opthalmie Militaire à l'Academie Royale de Medecine en Belgique. 8vo. Bruxelles. $2

Williamson.—Notes on the Wounded from the Mutiny in India. With a Description of the Preparations of Gun-Shot Injuries contained in the Museum at Fort Pitt. 8vo. London. $3.75.

FOREIGN MEDICINES, AND Druggists' Articles.

GAUDELET & GOURÉ,

IMPORTERS & COMMISSION MERCHANTS,

32 Platt St. NEW YORK. 32 Platt St.

IMPORTATION ON ORDER OF Foreign Perfumery AND *Druggists' Articles*

ALBESPEYERS—Epispastic Paper.
do Blistering Tissue.
do Issue Paper.
ANDURAN—Anti-gout Wine of Andnran.
AUBERGIER—Syrup of Lactucarium.
do Paste of Lactucarium.
AYMES Licorice Drops, Violets perfume.
BARRESWILLE—Tannate of Quinine Pills.
do do do Lozenges.
do do do Powder.
BELLOC—Vegetable Charcoal Powder.
do do do Lozenges.
BERAL—Tartrate of Potash and of Iron.
do Citrate of Iron.
do Carbonate of Iron.
do Citrate of Iron and of Quinine.
do Lactate of Iron.
do Iron reduced to Hydrogen.
do Officinal Chalk without odor.
do Dragees of Lactate of Iron.
do Ferrugineous of Nancy for Rusty Water.
do Lozenges of Citrate of Iron.
do do of Lactate of Iron.
to Saccharine of Citrate of Iron for Rusty Water.
do Syrup of Citrate of Iron.
do Syrup of Iodide of Iron.
do Poor Man's Plaster.
BERTHE—Cod Liver Oil.
do Syrup of Codeine.
BILLARD—Creosote.
BLANCARD—Pills of Iodide of Iron.
do Syrup do do.
BONJEAN—Dragées of Ergotine.
BOTOT—Tooth Water.
do Tooth Powder.
BOUDAULT—Anti-Dyspeptic Pepsine.
do Additional Pepsine.
BOYVEAU—Rob Boyveau Laffecteur.
BRIANT—Syrup Antiphlogistic.
BROU—Injection.
BUGEAUD—Balsam for the Nerves.
CASHOO of Bologne.
CAUVIN—Digestive Pills.
CHABLE—Injection.
do Syrup of Citrate of Iron.
do Depuratif Vegetal.
do Mineral Bath.
do Perfumed Bath.
do Toilet Water for Ladies.
do Anti-Tetter Pomatum.
do Pomatum for Piles.
CHARLES ALBERT—Bol of Armenie.
do Wine of Armenie.
CLERAMBOURG—Golden Pills.
do Grains of Life.
do Cough Syrup.
do Paste.
CLERET—Iodide of Potassium Bob.
do Pills of Iron and of Quinine.
CLERTAN—Pearls of Ether.
do do Chloroform.
do do Assafœtida.
do do Castoreum.
do do Digital.
do do Valerian.
do do Ess. of Turpentine.
COLTAS—Benzine in Bulk.
do Dragees of Santonine.
COURCELLES—American Elixir.
CROSNIER—Syrup Mineral and Sulphurous.
do Pills of Iodide of Iron and of Quinine.
DAROLLES—Rum Punch.
DEGENETAIS—Pectoral Paste.
do Syrup of Calf Lungs.
DEHAUT—Purgative Pills.
DELABARRE—Toothing Syrup.
DELANGENIER—Nafé Paste.
do Syrup of Nafé.
do Kacahont des Arabes.
DESBRIERES—Magnesia Chocolate.
DICQUEMARE—Melanogène (hair dye).
do Fixateur (for the hair).
DORVAULT—Horse Radish Syrup.
DUPONT—Regenerator.
do Anti-Glairous Elixir of Guillie.
DUSOURD—Ferruginous Syrup.
EAU—De Melisse des Carmes.
ESPIC—Pectoral Fumigator.
FAYARD—Paper.
FLON—Lenitive Syrup.
FORGET—Cough Syrup.
FRANK—Grains of Health.
GAFFARD—Grannles of Digitaline
do do. of Atropine.
GARNIER LAMOUROUX—Sugar-Coated Pills.
GAUTIER-LACROZE.—Syrup of Aconite.
do Balsam of Aconite.
GELIS & CONTE—Dragées of Lactate of Iron.
GENEVOIX—Iron reduced by Hydrogen.
do Anti-Gout or Oil of Horse-Chestnut.
do Dragées of Iron reduced.
GEORGE—Pectoral Paste.
GILLE—Dragées of Proto-Iodide of Iron.
do Depuratives Dragees of Lepetit.
do Syrup Proto-Iodide of Iron.
GUERIN—Balsamic Opiat.
GUILLIE—Anti-Glairons Elixir.
GUILLIERMOND—Syrup Iodo-Tannique.
HENEL—Powder for Dogs.
HOGG—Cod Liver Oil.
do Pills of Pepsine.
do do do and Iron.
do do do and Proto-Iodide of Iron.
HOMOLLE & QUEVENNE—Granules of Digitaline.
HUFELAND—Digestive Liqnor.
JOY—Pectoral Fumigator, Anti-Asthmatic.
KERATOPHILE—Pomatum for Horse Hoofs.
LABARRAQUE—Disinfecting Fluid.
do Wine of Quinium.
do Pills of Quinium.
LABELONYE—Syrup of Digitale.
LAMOUROUX—Syrup of "
LAROCHE—Wine of Quinia Bark.
LARREY—Cleansing Syrup.
LARTIGUES—Anti-Gout Pills.
LAURENT—Medicated Dragées.
LAVILLE—Anti-Gout Pills
do do Liqnor.
LEBEL—Secordium Powder.
do Savonules of Copaiba.
LECHELLE—Hemostatic Water,
do Castoreum Nevrosine.
do Anti-gout.
do Anti-Doloar, Silk.
do Cleansing Syrup of Larrey.
LECHELLE—Cubeb, Solid and Concentrated.
do Anti-Putrid Water.
do Anti-Fever Powder.
do Collyre Divin (Eye Wash).
LERAS—Liqnid Phosphate of Iron.
do Dragées of do do.
do Syrup of do.
LEROY—Vomitif.
do Purgatif.
do Pills
MATHEY-CALYLUS—Capsules pur Copalba, &c.
MEGE—Pur Copahine, &c.
MENE MAURICE—Acoustic Oil.
MONDINI & MARCHI—Cachou of Bologne.
MOTHES—Capsules of Copaiba.
do do of Cod Liver Oil.
MOURIES—Farina for Children.
do Chocolate do.
NAFE—See "Delangenier."
OLIVIER—Depurative biscuit.
PAUL GAGE—Taffetas.
do Anti-glairons Elixir of Guillié.
PELLETIER—Elixir and Odontine.
PEPSINE—See "Boudault."
PERSONNE—Iodine Oil.
PETREQUIN—Pills of Proto-Iodide of Iron.
PHILIPPE—Tooth Wash
do Tooth Powder.
do do Charcoal and Quina.
do Kouseo, ordinary dose.
do do strong dose.
PIERLOT—Valerianate of Ammonia.
PRODHOMME—Essence of Sarsaparilla.
QUERI—Cod Liver Oil Jelly.
QUEVENNE—Dragées of Iron redneed.
RACHAOUT—See "Delangrenier."
RAQUIN—Copaiba Capsules.
REGNAULT—Pectoral Paste.
ROBIQUET—Syrup of Pyro-Phosphate of Iron
do Dragées of do
DR. ROUSSEAU—Celestial Water for the Eyes.
ROYER—Cod Liver Oil.
ROGE—Citrate of Magnesia Powder.
do do Lozenges.
SAMPSO—Injection.
SEDLITZ—Powder.
SEGUIN—Wine.
SEIGNORET—Lozenges of Iodide of Potassium.
SODA—Powder.
TRANCHE LAHAUSSE—Regenerator.
VALLET—Ferruginous Pills.
VICHY—Water.
" Lozenges.
" Chocolate.
" Mineral Salts.
ZUCCANI—Benzine.

Articles always on hand.

DR. VALLEISE—Suspensories, Trusses, and patented Elastic Appliances, &c.
BREURE-PERIN—Vinaigre a la Glycérine.
do Soap Glycerine.
do Paste, do *g. modèle.*
do do do *p. modèle.*
do Perfumed Glycerine.
DR. PIERRE—Dentifrice Water.
do Vinaigre, Toilet Vinegar.
do Roses Toilet Vinegar.
HOUBIGANT-CHARDIN—Perfumery.

NOTICE.—We beg to advise our Customers, that our frequent and direct intercourse with the owners of the above Medicines, as their Agents or Consignees, allows us to assure them, that by addressing their orders to us, they will surely avoid the Spurious Articles, and at the same time, always obtain the very lowest prices.

Toilet Articles: Brushes, Shell-combs, &c.

Orders received and promptly executed for the following articles.

Medicinal Herbs.
Homœopathic preparations.
Utensils for laboratories.
Surgical instruments.
Vulcanized instruments of Galante.
Apparatus for Gaseous Water.
Philosophical instruments.
Chemical do.
Fancy labels for druggists.
Ordinary and philosophical scales.
Glass, crystal, and china vases.
Scientific books.
MAUGENET & COUDRAY Perfumery.
DEMAISON CHETELAT do.
LUBIN do.
VIOLET do.
PIVERT do.
SOCIETE HYGIENIQUE.
MONPELAS do.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.
By SAMUEL R. PERCY, M.D.,
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE II.—PART I.

CORROSIVE CHLORIDE OF MERCURY.*

Hydrargyri Chloridum Corrosivum. U. S.—*Hydrargyri Bichloridum.* Lond.—*Sublimatum Corrosivum,* Dub.—*Sublimatus Corrosivus,* Ed.—*Hydrargyri Perchloridum—Corrosive Chloride of Mercury.—Corrosive Sublimate.*

GENTLEMEN:—You will observe that we give you a number of names to this important medical agent, and it is right that you should know all the names by which an article is known. The reason so many different names are used, is because chemists have not been agreed as to the equivalent of mercury. While some have held to the opinion that the combining equivalent is 202, others state it to be 101. Supposing the equivalent to be 101, and you will see by our formula (HgCl), that we have adopted that theory, the present article is correctly a protochloride, while calomel is a subchloride (Hg_2Cl). But if the equivalent number is 202, then the present article is a *bi, per, deuto*-cloride ($HgCl_2$), while calomel is a proto-chloride (HgCl).

But as physicians, you need not be troubled about these names; it is sufficient for you to know them, you need not use them. The United States Dispensary has adopted the best of names to distinguish these two chlorides. The one we are at present considering is called Hydrargyri Chloridum Corrosivum, or Corrosive Chloride of Mercury, while calomel is known as Hydrargyri Chloridum Mite, or Mild Chloride of Mercury. Let me advise you always to use these distinguishing names, by so doing you may avoid making serious mistakes.

Preparation. I. *By the Dry Process.*—Mix two parts of dry neutral persulphate of mercury in a porcelain mortar, intimately with one part of powdered and well dried common salt; shake the mixture into a glass flask, which should be only one-third full. Place the flask in an iron dish containing a thin layer of sand, then surround with sand to half its depth, and put the whole into a ring furnace and apply heat, which should be moderate at first. The heat need not at any time be very great, or a considerable portion of the sublimed salt will fuse and fall back again, and thus retard the process. As soon as the sublimate begins to condense upon the upper part of the flask, the mouth is carefully closed to prevent loss. When no more white stellated groups of crystals appear on the surface of the powder at the bottom of the flask, the latter is withdrawn from the sand, cracked by touching it with a wet sponge, and when cold the sublimate in the upper portion of the flask is separated from the glass and kept in vessels excluded from the light.

II. *By the Moist Process.*—Six parts of mercury, fourteen parts of hydrochloric acid (sp. gr. 1·130), and seven parts of nitric acid (sp. gr. 1·20) are mixed in a plain retort, which is placed in a sand bath, a receiver attached without luting and kept cool, whilst the distillation is carried on to dryness. When no more moisture forms in the neck of the retort, the receiver is exchanged for a dry one, the retort is buried as deeply as possible in the sand, and the heat continued until the salt is driven to the upper portion and into the neck of it. The retort is then withdrawn from the sand, a wet cloth applied to the bottom; when cold, the contents separated from the glass, and the product, which will be about eight parts, kept in a bottle excluded from the light.

I. Persulphate of mercury and chloride of sodium, when heated together, exchange elements; the oxygen of the oxide of mercury passes to the sodium, and the soda thus formed combines with the sulphuric acid; the mercury and chlorine unite and volatilize, whilst sulphate of soda remains behind; the reactions may be thus explained:—1 at. HgO, SO_3, and 1 at. NaCl, form 1 at. HgCl, and 1 at. NaO, SO_3.

II. Hydrochloric acid has no action on mercury, either cold or hot; but when nitric acid also is present, aquaregia forms, and the metal soon dissolves entirely, forming perchloride of mercury, water, and nitric oxide, which forms in the air brown vapors of hyponitric acid; the reactions may be thus explained:—3 at. Hg, 3 at. HCl, and 1 at NO_5, form 3 at. HgCl, 3 at. HO, and 1 at. NO_2.

Properties.—Corrosive chloride of mercury forms a white crystalline mass, consisting of right rhombic prisms heaped together. It is odorless, but possesses a very nauseous metallic taste; it fuses when heated, and volatilizes readily and completely. One part dissolves in sixteen parts of cold and in three parts of boiling water, in two and a half parts of cold alcohol, and in three parts of ether; all of which solutions have an acid reaction. From a hot solution in water it crystallizes on cooling in prisms of a different form from that of the sublimed salt; it is therefore dimorphous. It is soluble also without change in sulphuric, nitric, and hydrochloric acids. It dissolves more readily in solutions of the alkaline chlorides than in pure water, as it forms with them double salts which are very soluble; of these the double salt of mercury and ammonium, *the old sal alembroth, or salts of wisdom,* is still used in pharmacy under the name of Liquor Hydrargyri Bi-chloridi. In a strong light corrosive chloride of mercury becomes reduced, first to proto or mild chloride, and finally to the metallic state. If on treating with water there is a white residue, which is blackened by a solution of potash, *calomel* is present. If it contains any reddish spots, there is a mixture of peroxide of iron.

Tests of Purity.—It should sublime when heated without residue. It should be entirely soluble in sixteen parts of water, in three parts of ether, or in two and a half of alcohol. It should be white and dry.

Incompatibles.—With many of the metals, alkalies, alkaline earths and their carbonates, the soluble salts of silver and lead, soap, lime water, tartar emetic, the soluble sulphurets, ferro and ferridcyanides of potassium, sulphur, hydrosulphates, chromate and iodide of potassium, protochloride of tin, piperin, volatile oils, several vegetable infusion and decoctions, and animal and vegetable substances containing albumen, gelatine, or gluten. A solution of this salt is decomposed in the light, but this change is prevented by the presence of the alkaline chlorides.*

Composition.—As it contains one atom of mercury and one of chlorine, its composition is about seventy-four per cent. of mercury and twenty-six of chlorine.

Effects on the System—Local and External.—Corrosive chloride of mercury in a concentrated solution is moderately caustic, producing a considerable amount of irritation. These effects are to some degree produced by its strong affinity for albuminous substances, which it decomposes, and unites with chemically. Its principal local application is to indolent ulcers of a syphilitic character, or to syphilitic cutaneous eruptions. It may be used also, with much benefit, in aqueous solution, to various ulcerated conditions of the throat, with a camel's hair pencil, so as to confine its application as much as possible to the diseased structure. There are other conditions of the throat also, where there are no ulcerations, in which I have made use of it with much benefit, employing a solution in water, from two grains to the ounce, up to a concentrated solution. The diseased conditions of the throat to which I refer, are such as

* Although this article is not a new remedy, yet it possesses so much interest in its more recent applications in practice, that I have placed it in this connexion.

* A more extended table of incompatibles will be found in the Epitome of Braithwaite's Retrospect, pp. 887–889

are seen in scrofulous persons, where the mucous follicles of the tonsils are enlarged and in an unhealthy state, and also in those diseased conditions of the posterior nares and pharynx, caused by that condition of the mucous membrane of the upper air passages, called catarrh. But great caution is necessary in applying this solution, especially to the schneiderian membrane, otherwise it may produce great local irritation. Professor G. B. Wood recommends it very highly for its caustic effects in onycha maligna; he says, "We occasionally meet with an exceedingly obstinate ulcer, situated around the nail of the finger or toe, attended with considerable swelling, of a fœtid odor, and very ill-conditioned appearance, which frequently separates the nail, and seems to show no tendency to heal. Formerly it was deemed necessary sometimes to amputate the finger or toe. I have never met a case which refused to yield to the following treatment, which originated with the late Dr. Perkins, of Philadelphia:—Equal parts of corrosive sublimate and sulphate of zinc, well powdered, are thoroughly mixed; the mixture is sprinkled thickly on the ulcerated surface, so as to cover the whole of it deeply; a pledget of lint, thoroughly wet with tincture of myrrh, is placed over the powder, and the whole dressed with a compress and bandage. It is of little consequence what alcoholic liquid is used, the object of it being, that it should act as a solvent to the mercurial salt. I have generally substituted laudanum for the tincture of myrrh. Severe pain is experienced, which ceases in half an hour, or less; and upon the removal of the dressings, some hours afterwards, an eschar is seen to have formed, covering the whole surface of the ulcer. This is thrown off in the usual time, and a healthy surface left, which heals without difficulty. Little effect is produced on the sound flesh. Whether the chloride would answer the same purpose without the salt of zinc, I do not know, for I have never tried them separately." Very finely powdered sugar may be substituted for the zinc, especially where there is much œdema, as the flow of serum will be much more abundant than with the zinc, and the pain is not so severe; a small quantity of muriate of morphia might be incorporated.

Trousseau recommends a solution of this salt in pruritus of the vulva, but it more frequently fails than cures—at least with me.

Internal Effects.—We have spoken of the action of several of the preparations of mercury, and their modus operandi, we therefore shall not have occasion to detain you for any length of time on the action of this remedy.

Corrosive chloride of mercury is used in syphilis; most frequently, however, in the secondary form of this disease. Since the time of Van Swieten and Boerhaave, it has been extensively employed in the pains, nodes, and eruptive diseases of syphilitic origin; and in a great majority of these cases it is found to be of essential benefit. By many persons it is used also in primary syphilis, but it is generally acknowledged to be of inferior value in this form, to some of the other preparations I have before mentioned. It is said by most authors to be contra-indicated, if, in addition to the syphilis, there is a scrofulous taint in the system; but in my opinion, these are the cases that are most benefited by its use, if proper and skilful combinations are made with it. Wherever you find a syphilitic disease engrafted on a scrofulous diathesis, you must be prepared to find an irritable, anæmic, and depraved condition of the system; and so long as you allow the syphilitic disease to continue, that depraved condition will last. It is absolutely necessary to cure as quickly as possible, this poisonous syphilitic disease; and because many have attempted to do it with the corrosive chloride alone, and have thereby not only failed, but have increased the irritability of the system, they have condemned the remedy as an irritant and excitant: whereas, had they administered it in skilful combinations, keeping in view the complications attendant upon the disease, they would have been rewarded with better success. In explaining to you the *modus operandi* of mercury, I stated, that it deteriorated the quality of the blood by diminishing the amount of fibrin, and generally of the corpuscles also. In scrofula and anæmia we have already a great diminution of the corpuscles of the blood, and generally the fibrine is also much diminished; we therefore see that if we are compelled to administer mercury to counteract a morbid process, or remove a morbid material from the system, we must assist its operation by a tonic, like quinia, or the vegetable bitters, or a chalybeate, as iron. If we have, in addition to this anæmia, an irritable state of the digestive organs, we may need a mild saline, as chlorate of potassa, or a sedative, as hyoscyamus, conium, or opium. I do not intend to give you prescriptions to follow; I have not been guilty of this folly; I wish merely to give you broad principles by which you may be enabled, whenever necessary, to furnish the exact prescription needed to each particular case. I am sorry to say that the public condemn most severely a physician for administering this remedy, and yet reward empirics with large fortunes for giving them the same. The well known Swaim's Panacea, and many other quack nostrums that I could name—if I should not be giving them an additional advertisement by so doing—owe all their medical activity to the corrosive chloride of mercury contained in them; and yet the populace took these remedies for years, and many received great benefit from them, not only in syphilitic diseases, but in scrofula, and other deranged conditions of the system.

You will find this remedy of great service in some of the chronic enlargements of the mesenteric glands, and also in some of the forms of chronic rheumatism, enlargements of the liver, and dropsical effusions.

Corrosive chloride differs from several of the other preparations of mercury, owing to its greater solubility; on this account it is more powerful, requiring a smaller dose, and is more irritant if taken in an over dose. Being more soluble it is more readily removed by the secretions, especially by the urine, and is therefore less apt to produce salivation. On this account it is not so applicable in iritis, and diseases of a highly inflammatory character, but is more adapted to chronic than acute diseases. This, like other preparations of mercury, excites the functions of the liver, and largely increases the pancreatic secretion; and it is probably owing to these actions that, in many instances, it improves the digestion.

Administration.—When given internally, it should be used in solution, as it is less likely to irritate the stomach and throat than if given in substance or pill. The dose is from one-sixteenth to one-eighth of a grain, two or three times a day, and may be given in combination with hydrochlorate of ammonia, as in the *Liquor Hydrargyri Bichloridi*, or in solution in water. It is frequently given in combination with the compound tincture of cinchona, and this, as a general rule, forms one of its best adjuvants. It is also administered, by some persons, with syrup and infusion of sarsaparilla, and I generally use it in combination with cold infusion of colombo, or gentian; with these latter it seldom irritates the stomach, and is tolerated for a longer time. In larger doses, or by too long continued use of these small doses, it gives rise to an irritable and uneasy condition of the stomach and bowels, with griping pains, nausea, painful purging, and disordered digestion. Some few years ago I saw a well marked case of this chronic poisoning:—A young gentleman had been given, by a Hahnemannie practitioner, a quantity of this corrosive chloride of mercury, which he had taken every four hours, for eleven days. When I saw him, moderate salivation had commenced; he was much weakened, and his digestion much disordered; he had griping pains in the abdomen, a painful and scanty diarrhœa, accompanied by a burning heat in the rectum; a dry and troublesome cough; nausea, giddiness, gastro-enteritic irritation, and a small secretion of urine, which occasioned great pain in passing. With opium and other remedies he was soon relieved of urgent symptoms. By testing the medicine that was left, I found that he had taken about one-sixth of a grain every

four hours, for eleven days. When treating on Calomel, I referred to the antidotal effects of chlorate of potash and iodide of potassium in controlling, and to a great extent preventing salivation; and that mercurials may be administered for a length of time without very visible signs of salivation, if chlorate of potash is also used in proper doses, three or four times a day. We then discussed the modus operandi of these medicines when administered simultaneously.

Original Communications.

THE MECHANISM AND TREATMENT OF LABORS WITH FACE PRESENTATIONS,

BEING IN PART A PAPER READ BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By JOSEPH MARTIN, M.D.

OF NEW YORK.

I WISH to place the result of my observations and experience in relation to this description of labor more fully before the profession. For if it be the duty of obstetric practitioners to adopt those methods of managing labors which will preserve the lives of the greatest number of parturient women and their infants, the subject deserves serious consideration, particularly as the object of the paper is to show that those children, who, in face presentations, will inevitably be lost, if the labors be left to nature, may be saved by a very simple operation. It is not denied that the accumulated evidence of the most learned and experienced accoucheurs, from the time of Portal to the present day, shows that a labor, with the face presenting, can be brought to a close by the unaided efforts of nature; nor that the statements made by these writers also show that labors of that description, which have occurred in large numbers in the hospitals over which they had supervision, have terminated with but a limited mortality to infants. Still it must be admitted that from fifteen to eighteen per cent. of the children, in such cases, are still-born. For Mad. Lachapelle, whose opinion has had so much weight in excluding from the practice of midwifery what is called "rash interference in face presentations," stated, that out of the seventy-two cases that occurred under her superintendence at the Maternité Hospital in Paris, only forty-two were saved. And non-interference has also been recommended by other writers on midwifery who have experienced similar results. The inference is, that the opinion has prevailed, and is still entertained, that no mode of practice has been or can be devised by which a greater number of infants may be saved in such labors, than when they are left to nature. And, as version and the use of the forceps are out of the question, the only point to be decided is, whether or not a face can be converted into a vertex presentation; which can be determined in no other way than by ascertaining the true mechanism of such labors.

In giving the opinion advanced in the essay in relation to this, the most important part of the subject, I am well aware of the immense weight of authority against me. But the fundamental laws which control the mechanism of labors with cranial presentations, in all their modifications, as well as in the physiological process, are as immutable and as unerring in their results as the law of attraction. And, while it is true that no accoucheur can adapt these laws to his theories, it is equally true that no amount of learned opinions and elaborate descriptions, not based upon the principles of mechanics, can define the true mechanism of a labor. And all the writer asks is a careful investigation of the subject, in the only legitimate way in which such disputed points can be decided, that is by observations made at the bed-side, and by giving a fair trial to the practice recommended.

Labors with malpositions of the fœtal head, which terminate in face presentations, although of rare occurrence, have received more or less attention from all systematic writers on midwifery. But a careful perusal of the works of these authors will disclose a great discrepancy of opinion in relation to the causes of the abnormal positions, and the mechanism and treatment of such labors. The older writers differed in opinion as to the manner in which presentations of the face originate, but recommended the best methods then known for correcting the malpositions, and hastening delivery; while modern accoucheurs, without agreeing as to the causes and mechanism of these labors, object to interference, and repudiate all attempts to change a face to a vertex presentation.

Having had some experience in labors with presentations of the face, I have thought it desirable to direct the attention of the profession to the subject by giving the results of careful investigations, and a few observations made at the bedside. But before stating what I consider the cause and the true mechanism of such labors, upon which their proper treatment depends, I will give briefly the views of some acknowledged authorities on the subject; confining myself, for the present, to that description of face presentation which terminates with the chin under the arch of the pubes.

Doctors F. Churchill, Simpson, and Tyler Smith consider malpositions of the fœtal head, those with face presentations particularly, to be caused by premature labor, by the death of the fœtus in utero, by the application of unusual excito-motor stimuli to the fœtus and uterus, and by causes mechanically displacing the whole fœtus, or the presenting part, at the beginning of labor. The mechanical causes only demand our attention; because we can have nothing to do with the two first causes mentioned, and Dr. Duncan has shown that the action of excito-motor stimuli upon the fœtus is exceedingly obscure and doubtful.

All modern writers on midwifery have represented, by descriptions and wood-cuts, the uterine tumor, at the beginning of such labors, nearly vertical, with the chin fully extended, and the occiput flexed upon the cervical vertebræ. But it is difficult to conceive how any mechanical action can throw back the fœtal head into that position, while the child is floating in the liquor-amnii, and retain it there until the utcrine contractions force the face directly into the superior strait. Yet Cazeaux, who admits that uterine obliquity may cause a face presentation, contends that—"The face does present itself at the superior strait, at the beginning of such labors." And he quotes Mad. Lachapelle, who states that she made autopsies of the bodies of two women, at the end of pregnancy, and found the infants presenting by the face. But I may here remark, that neither he nor Mad. Lachapelle gives any account of the positions of the bodies of the infants in those cases. Cazeaux also states that, among the eighty-five presentations of the face, given by the authors of the French Dictionary of Medicine, only three had any decided obliquity. From these facts, and, as he says, from many others, he concludes that a great majority of face presentations are not caused by any inclination of the uterus, but that they are primitive in their origin; and that their causes have escaped our notice. This was the opinion of Dubois also, who carried his theory of the primitive origin of face presentations to a fanciful extent. Chailly states that obliquity of the uterus is regarded by most accoucheurs as the principal cause of such presentations. Yet in his work on midwifery there are wood-cuts, similar to Cazeaux's, representing the fœtal face turned downwards at the superior strait, with the chin fully extended, while the body of the fœtus is vertical. Denman and Tyler Smith, without giving any cause for such malpositions, have copied the wood-cuts of previous writers. Dr. F. H. Ramsbotham says, "According to the majority of writers, uterine obliquity is the cause of the secondary face presentations, after a brow presentation;" but his illustrations show the fœtus in the position represented in the

text-books generally. A glance at the different views of these writers will show that the causes of face presentations are not yet definitely determined upon by the profession.

With regard *to the mechanism of labors, with face presentations*, it is plain that from the time of Baudelocque, nearly one hundred years ago, an opinion has prevailed that, in such cases, the fœtal head enters the superior strait by the mento-frontal diameter, with the chin fully extended from the beginning to the end of the labor. As to the position of the head in such labors, at the beginning, Cazeaux, Dubois, Mad. Lachapelle, and Naëgelè agree that there are but two—that is, that the chin is either at the right or left extremity of the transverse pelvic diameter. Baudelocque gives four positions with the mento-frontal diameter in relation with one of the oblique diameters of the pelvis; and this opinion is adopted by modern writers on midwifery.

I will now give briefly Cazeaux's description of a labor with a face presentation, because it is easily understood, and embodies the views of most writers of the present day. He divides the labor into five periods, that is—forcible extension—descent—rotation—flexion—and exterior rotation. In describing the first period, he supposes the head to be moderately extended, and that the extension is completed by the first uterine efforts, after the discharge of the waters. This preparatory step, he says, brings the diameter of the head in relation with those of the pelvis, the fronto-mental with the transverse. During the second stage, that of descent, the head, completely extended, engages in the cavity of the uterus, and descends as far as the length of the neck will permit. The third stage, that of rotation, then commences; that is, the chin turns towards the pubic arch, and the occiput sinks into the cavity of the sacrum. During flexion, his fourth stage, the head is acted upon as a lever of the third kind, and the occiput, as it is forced over the perineum, describes the arc of a circle around the pre-trachelian part of the neck as a centre. The external rotation is similar to that of the head in vertex presentations, except that the still extended chin, instead of the occiput, merges from under the arch of the pubes.

With regard to *the treatment of labors with face presentations*, recommended by the authorities of the present day, non-interference is the rule of practice; and the only exception is when the head is large, and the pelvis small, when the forceps is to be used. We will, however, glance at the methods of managing such labors adopted by the older practitioners of midwifery, and give the views of some modern writers.

Wandell, in 1674, mentions his having turned the head in labors with presentations of the face. And Blundell, in 1751, speaks of rectifying malpositions of the fœtal head by external and internal manipulations. But version seems to have been one of the first means generally employed by the obstetricians to meet these difficulties. Mesnard, in 1753, was among the first to recommend this mode of treatment. But it was seldom resorted to after the vectis came into use; and has been abandoned since Tyler Smith showed that the chances of death to the child are double what they are when the labors are left to nature.

The vectis, soon after it was made known, was very much used to bring down the occiput in face presentations; not only while the head was at the superior strait, but after it had entered the pelvic cavity. But the tide of professional opinion set against its employment, in such cases, when Mad. Lachapelle pronounced labors with face presentations natural labors. She adopted the views of Portal, who, upwards of one hundred years before, announced the fact that such labors are susceptible of spontaneous termination; and advanced the opinion that they are favorable to mother and child. Naëgelè and Moreau agree with her; but Chailly repudiates the idea, because, as he says, such labors frequently compromise the life of the infant. Daventier, Rodenier, and others, also rejected the views of Mad. Lachapelle. Gardien, Maygner, and others, assented to the doctrine, but adopted means to prevent and correct the malpositions. Denman condemned interference, but used the forceps when the head was large and the pelvis small. Dewees favors the methods for correction recommended by Baudelocque; but his advice in general is, to leave such labors to nature. Cazeaux adopts the generally received opinion, that there ought to be no interference, and denies the correctness of the assertion made by Guillamot, that—"A labor with a face presentation can be converted into one with a vertex presentation;" because, he says, the long diameters would interfere.

Dr. F. A. Ramsbotham advises, if the labor be advanced, to turn the face into the hollow of the sacrum, by means of the hand. This mode of practice, in such cases, has been resorted to by British practitioners to a greater or less extent; the occiput being brought down by the fingers as a part of the operation. Smellie, in his second volume, London edition, 1754, records several labors of this description, in most of which he used his forceps. But, at page 280, he describes a case in which he introduced his hand, and changed a face to a vertex presentation by grasping the vertex with his fingers and thumb, and bringing it down.

But Baudelocque carried the practice of making these corrections to a greater extent than any known writer. He drew down the occiput with his hand, or one blade of the forceps, in such labors, whenever he could accomplish it; and says—"Experience authorizes me to say that it can be done without much trouble when the head is movable, at the entrance of the pelvis, or capable of being moved back to it." And on pages 525 and 526, Dewees's edition, he gives minute directions for the performance of the operation. He tells us, in operating with the hand, to introduce it posteriorly on the left or right, according to the position, until we can bend the fingers over the occiput to bring it down. In using one blade of the forceps he directs us to pass it up in the same manner until its extremity embraces the concavity of the occiput. These methods of managing such labors were adopted for a while by a few accoucheurs. But Naëgelè condemned the treatment; and from that period the practice of non-interference, which now prevails, may be dated.

The objections to Baudelocque's practice in labors with face presentations, as given by Tyler Smith, are four. The first is, that "the chin, in such cases, is at first turned backwards, and afterwards turned forward under the arch." But I will presently show that this makes not the slightest difference, provided the treatment for correction be resorted to before the chin passes under the pubes. In the second place, it is contended that "great pain is caused to the mother, and there is danger of exciting inflammation in the maternal parts, by the introduction of the whole hand into the uterus at the beginning of labor." But Baudelocque does not recommend an introduction of the hand at the beginning of such labors, and before the os is well open; and a reference to his method of managing cases that require the use of the whole hand will show that no such results can attend the operation, when performed at the time, and in the manner he recommends. As to the third objection, that is, that "there is danger of a descent of the funis during the operation;" a glance at the text will show that such a difficulty cannot occur if his directions be followed. Tyler Smith, in reference to the fourth and last objection to bringing down the vertex in face presentations, remarks—"If the least analogy existed between a labor when the vertex presents spontaneously, and one in which it has been dragged down, it would be proper to resort to Baudelocque's method." But in what particulars the artificial presentation differs from the natural he has not thought proper to inform us. Besides, this objection to Baudelocque's practice loses all its force when we are reminded that Tyler Smith, in his lectures on the management of natural labors, advises the drawing down of the occiput with the hand or vectis whenever the fontanelles are found to be on the same level.

(To be continued.)

LEAVES OF THE RICINUS COMMUNIS, AS A GALACTAGOGUE.

By WILLIAM GILFILLAN, M.D.

SURGEON TO THE LONG ISLAND COLLEGE HOSPITAL, BROOKLYN, N.Y.

The want of a reliable galactagogue has been felt, I presume, by every one in the profession, at one time or another.

In belladonna we possess almost a certain remedy to check the lacteal secretion when such a course is indicated. But when the secretion is deficient, or entirely absent, and the patient is anxious to nurse her own infant, have we a remedy that will increase the secretion, or compel the mammary glands to perform their function when they would otherwise remain inactive?

The ordinary remedies, such as stimulating frictions, hot fomentations, application of the child, or the pump, to the breast, etc., frequently succeed. Yet there are cases which are quite uninfluenced by these means. For such cases I would recommend the leaves of the castor-oil plant. My experience of this remedy is limited to one case; but the effect was marked and unmistakable. I have delayed publishing it, hoping I would meet a similar one, and thus offer stronger evidence of its power; but I now think it better to record my limited experience, that others may be induced to try it.

In July, 1860, I attended Mrs. H——, a primipara, at full term. The labor was easy and natural, and the child vigorous and active. The mother was tall, well formed, and not anæmic. The breasts were very small; not larger than those of a virgin, although the areola was dark. The child was applied to the breast the second day, and friction used. The breast-pump, frictions, and fomentations were assiduously employed for seven days, but there was no enlargement of the breasts, or hardening of their texture. A few drops of watery milk were observed on the eighth day; but afterwards even this disappeared, and on the twelfth day all efforts were abandoned, and the child was fed. It died a month afterwards of diarrhœa.

The lady again became pregnant, and she had great apprehensions that she would not be able to nurse this child also, and that it would die, or she must submit to the domestic tyranny of a *wet-nurse*. At full period of gestation, July 3d, 1861, she was delivered of a fine boy. The breasts were as small as a virgin's, and rather flaccid. As in her previous confinement, frictions, fomentations, etc., were assiduously applied, but to no purpose. July 7.—The breasts remained *in statu quo*, no febrile excitement. *It was now evident the breasts would not secrete milk as a natural function, nor by the stimulus of any of the means heretofore employed.* I recalled to mind a letter in a number of the "Medical Times" for April, 1861, from Mr. Cushman, Druggist, 941 Broadway, inviting the profession to test the efficacy of the leaves of the Ricinus Communis as a galactagogue, and placing his preparations of it at their disposal. I determined to try it, as on this occasion, and the previous accouchement in 1860, I had exhausted all the means I knew without success. Through the kindness of Mr. Cushman I received a supply of the fluid extract (alcoholic) of the leaves, and also some of the dried leaves. I pulverized the leaves coarsely, and poured boiling water on them so as to make a poultice, which was applied to each breast. As the dose of the extract was uncertain, I ordered a teaspoonful three times a day, and gave a good dose at once.

July 8.—When I called Mrs. H—— was quite delighted, as she had a moderate flow of milk. About two hours after the poultice was applied and the first dose taken, she experienced a strange sensation in the breasts, and this increased after each dose of the medicine. Although the milk came pretty freely, the breasts were still small. The poultice was not renewed, as I had used the supply of leaves; but the extract was taken in the same dose for two days more. The second day of taking the extract, the secretion became quite abundant; the breasts began to enlarge, and continued to do so for two weeks. The child has thriven remarkably well, without any other nourishment. The extract had no *purgative* or other appreciable effect that I could observe. There was no acceleration of the pulse.

This case may not be as convincing to others as it was to me; but I think the evidence is such, that they should give it a trial in a suitable case, more especially as it is innocuous. The proofs of the efficacy of the leaves of Ricinus Communis as a galactagogue in this case are three in number:—

1st. In two accouchements of a healthy, vigorous woman, the breasts did not secrete. In the first, frictions and fomentations, etc. etc., were faithfully used for ten days, but no secretion took place. In the second, these means were used till the end of the fourth, or rather, the beginning of the fifth day, without the least sign of improvement. Another remedy, untried in the former instance, was now given, and next day the secretion commenced. This is "post hoc;" perhaps a larger experience is required to enable one to affirm, that it is "propter hoc." 2d. Up to the time this remedy was given, the mammary glands were small and ill developed; but after its use they gradually increased. 3d. The secretion of milk was unattended by acceleration of the pulse, or febrile symptoms, which are generally present when milk is first secreted after delivery.

The Negroes of the West Indies place great faith in the castor-oil leaves as a galactagogue, and frequently use them for this purpose, applying the fresh leaves, bruised.

A NEW EXTENSION SPLINT

FOR THE TREATMENT OF MORBUS COXARIUS.

By JOSEPH H. VEDDER, M.D.,

FLUSHING, LONG ISLAND.

The appliances of surgery are so numerous that one must needs hesitate in presenting a new instrument to the notice of the profession. That figured in the adjoining cut (Fig. 1) commends itself for simplicity, lightness, and moderate cost. It consists of a strip of *black walnut*, maple, or cherry wood, one and a half inches in width and three-eighths of an inch in thickness, extending from the crest of the ilium to the malleolus externus, perforated at the upper extremity for the passage of a cord attached to the perineal band. At a point midway between the knee and the ankle, on the external surface of the splint, is placed a brass pulley, one inch in diameter, and one-fourth of an inch in thickness, revolving on a pivot with a square head, to which is adapted an ordinary clock key. This pulley is secured to the splint by means of a box of the same material; its outer edge is smooth, while its inner edge is ratcheted. A catch and spring, as seen in the engraving, are placed contiguously to fix the pulley at any desired point. By means of a perforation through the outer surface of the pulley, one end of a catgut cord—D, violin—is attached, while the outer end plays over the groove and through the splint, over a small roller, placed near its lower extremity. Retentive straps are secured to the splint by means of wire loops placed along its edges, at points indicated in the engraving. In certain cases, it will be found necessary to curve, or bend by means of steam, the femoral portion of the wood to the outline of the limb, to prevent pressure when extension is made.

FIG. 1.

NOTE.—The substance of this paper was presented, by request, at a meeting of the Surgical Section of the New York Academy of Medicine held Nov. 22d, at the house of Prof. James R. Wood.

Before applying the apparatus, a wide strip of adhesive plaster, extending from the trochanter to a point one-third the distance below the knee, and secured by cross strips, is placed on the outer aspect of the limb; a loop of tape is secured to the lower end of the plaster, and a bandage is rolled around the whole leg. The perineal strap is now adjusted, and secured by a cord to the upper extremity of the splint (Fig. 2), the lower catgut string is tied to the loop referred to and the whole splint is held in position by the retentive straps. Extension to any degree is now effected by means of the pulley.

Fig. 2.

At the point of contact with the spring, the catch has a recess or notch in order that it may be held from the ratchet when extension is relaxed. The retentive bands may be conveniently made from the tape ordinarily used for boot straps, and a strip of leather may be placed between the buckle and tape to prevent abrasion.

The knee-cap should be made from firm linen covered with chamois, buckskin, or other soft material. When canton flannel adhesive plaster cannot be procured, it will be necessary, for greater security, to double the ordinary plaster. In the hospitals of New York, the perineal band is usually made by passing a strong tape of the required length, provided with eyelets at the ends, through a shorter piece of india rubber tubing about three-fourths of an inch in diameter. If, before the ends of the rubber are secured, a slight excess of the tape is inclosed in the tube, limited extension of the perineal band may be gained. Upon removal of the apparatus at night, extension of the limb is maintained by means of a weight at the end of cord traversing a pulley, fixed at the foot of the bed and attached to the loop at the extremity of the adhesive plaster.

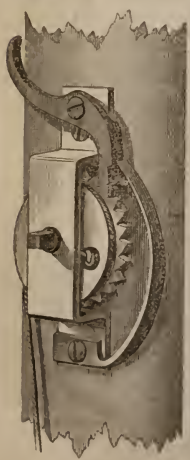


Fig. 3.

It will be observed by those familiar with the recent literature of morbus coxarius, that the apparatus thus minutely described, is original only in the simplicity of its mechanical contrivance (Fig. 3). The profession, with marked unanimity, have pronounced in favor of the walking extension mode of treatment. Although the apparatus in general use accomplishes the proposed end, it was deemed desirable to construct a simple yet effective appliance, in order that this advanced system of cure might be extended to that class of patients among whom the disease so frequently occurs; a class who have been hardly able to purchase the apparatus, much less to remunerate the physician. To practitioners residing remotely from the great cities, no inconsiderable point in favor of the splint is, that it may be made by a gunsmith, locksmith, clockmaker, or any mechanic familiar with the use of tools.*

Reports of Hospitals.

NEW YORK EYE INFIRMARY.

DR. NOYES, ASSISTANT SURGEON.

SUPPLEMENTARY OPERATION FOR ENTROPIUM.

A. B., æt. 24, native of Ireland; in the month of March, 1861, had the border of the upper and of the lower eyelids, including the ciliæ, removed for entropium of long standing. The rubbing of the lashes had caused deep opacity and vascularity of the cornea. The removal of them alleviated the condition of the eye, but did not remove all the irritation. In October last I saw her again, and although no ciliæ remained, I found the cornea still opaque, and the eye giving her a good deal of pain. I noticed that the fibro-cartilage of the upper lid was much deformed by chronic inflammation—that it was unusually convex, shortened, and its border incurvated to a slight degree, so as to cause the edge to rub upon the cornea in every act of winking. I noticed as the further consequence of the distortion of the cartilage, that the length of the palpebral opening was shortened.

I concluded that the irritation of the eye was kept up by the unnatural pressure of the tarsal border upon the cornea. I therefore did the following operation:

Having etherised the patient, I extended the fissure of the eyelids by an incision from the external commissure half an inch long, passing directly outwards, cutting through both skin and conjunctiva. After the bleeding ceased, I stitched the cut edge of the conjunctiva to the cut edge of the skin by one suture above and another below. The cut edges of the conjunctiva were not more than a quarter of an inch long, and the rest of the wound of the skin I united by another suture. By this proceeding, I lengthened the palpebral fissure and hoped to keep it so permanently by having united the conjunctiva to the skin as far as the former would allow. In this I succeeded, the edges united partly by granulations, and the opening of the eyelids was enlarged about two lines. This sufficed to relax the pressure of the border of the upper lid upon the cornea, and the irritation of the eye subsided. Now, there is very little vascularity of the cornea, and its opacity is diminishing.

This operation has been done several times at the Infirmary, and the plan of it as I have described, is to be found in Arlt's Treatise on Diseases of the Eye—"Krankheiten des Auges, Prague, 1858."

EXTRACTION OF CATARACT.

I report the following case on account of an unusual accident during the operation, and as showing the value of continued closure of the eye with plaster after extraction:

Prince Davis, æt. 62, colored. In good health, except a mild bronchitis causing him to cough and expectorate moderately. In the right eye cataract was complete, in the left eye not so far advanced. Perception of light in the right eye perfectly good. The arcus senilis surrounds all of both corneæ. The eyeballs stand out very prominently, projecting beyond the supra-orbital ridge. Has never had muscæ volitantes. The surface of the ripe cataract has a glistening, satiny look, no striæ to be seen. Pupils contract promptly when exposed to light.

Operation.—Patient undressed, and in the bed where he was to remain. The eyelids kept open by Dr. Bumstead, who lifted up the upper lid by a fold of the skin so as to

* The splint may be obtained of Mr. A. L. Bevans at Flushing, or of the surgical instrument makers in New York.

raise it off of the eyeball. I took this precaution because there was great spasm of the lids, and the orbicular muscle was unusually vigorous. The section was made through the upper part of the cornea by a small Beers knife, the eyeball being fixed with forceps until the point of the knife pierced the opposite side of the cornea; the forceps were then let go. The section was completed slowly, the eyeball being well under command, notwithstanding the spasm of the ocular muscles. The section was perfectly semi-circular and regular, but the instant the knife was free, the cataract jumped out of the eye and fell upon the pillow; a small quantity of vitreous humor escaped at the same moment. The spasm of the eye being uncontrollable, I was only able to partially expose the cornea, and could see that the pupil was filled with fluid or soft lens matter, and consequently of a grayish hue. The eyelids of both eyes were then sealed together by strips of Husband's isinglass plaster, laying an unusual number of strips upon the operated eye. The plaster, thus arranged, made uniform pressure upon the eye, besides keeping the lids immovable.

I explain the sudden escape of the cataract in this way. The pupil had been dilated with atropine, and did not contract when the knife entered the eye. The cataract was found to be very small; in fact, it was only the nucleus which jumped out. The surface of the lens had become liquified, constituting the so-called Morgagnian cataract. Under the spasm of the ocular muscles, for there was no pressure of fingers on the globe, the nucleus was easily forced through the wide pupil, because only the capsule could offer any resistance. The iris usually so supports the lens that rupture of the capsule does not spontaneously occur; but in this case, the nucleus only being hard and the pupil large, the body to escape, and the aperture through which it must pass, being of nearly equal size, the muscular spasm easily forced out the nucleus when the corneal wound was complete.

For four days the eye was left closed—there was slight pain in the forehead. On the fourth day, the lids were opened, the wound found united. The aqueous chamber seemed unusually distended, and the cicatrix of the wound a little inclined to bulge out. I feared prolapse of the iris, and therefore punctured the cornea, letting out the aqueous humor. Ordered unguentum hydrargyri to be rubbed into the forehead three times daily. Seventeen days after the operation, the eye could bear a moderate degree of light, the vascularity had nearly disappeared. The pupil is drawn upwards by the iris being engaged in the wound, but no prolapse of iris took place. The upper part of the pupil is clear, the lower part is obstructed by capsule and soft lens matter. Patient recognises faces and counts fingers.

The twenty-four hours following the operation, the patient spent in bed; after that, he was allowed to sit up and move about the darkened room. He took an anodyne expectorant to quiet his cough—this ceased to be troublesome after a few days. Having been used to drink spirits moderately, he was allowed an ounce of whiskey every night at bed-time. I attribute the successful issue of the case, despite the loss of vitreous humor, the shock to the eye by the sudden escape of the lens, the leaving behind of the fluid portions of the lens, and the unavoidable engagement of the iris in the wound, to the great precautions of the after treatment. The mode of closing the lids secured a good adjustment of the flap and apposition of the edges of the wound. This was the first condition necessary to prompt healing and to preventing prolapsus iridis. Again, the patient, after being kept on his back for twenty-four hours, was not wearied and made restless by longer confinement in this irksome posture. I apprehend that healing of the wound takes place in less than twenty-four hours, but it is not yet strong enough to sustain the pressure of the contents of the eye. The support of the plaster for three days longer gives it time to acquire strength. Still further, the patient had a good constitution, and was assisted in the process of repair by nourishing food and moderate stimulus.

The treatment of patients after extraction has undergone important modifications within a few years. The vigorous antiphlogistics have been dropped; the danger is not excess of inflammatory action, but want of nutritive power for healing a large wound in a tissue of naturally low vitality. Most frequently, persons blind from cataract are feeble, not only from age, but from the inactivity to which their blindness has condemned them. It follows, therefore, that to heal a wound of the cornea, they demand all the aid of good food, tonics, and moderate stimulus. Again, I think it prejudicial to insist upon long confinement in bed, because, for any healthy person to be thus placed is a serious infliction. The supine posture immediately, and for twenty-four hours after the operation, favors quietness of the patient and good adaptation of the wound. I think little can be gained by the supine posture after forty-eight hours, unless the patient be very restless and unmanageable when allowed to go about.

Surgeons in England and on the continent, complain of the frequency of prolapsus iridis. In the Eye Infirmary and in the private practice of our surgeons it seldom happens. Most foreign surgeons put a compress and bandage upon the eye; most of them examine the eye twenty-four hours after the operation. I do not wonder that the soft tissue, uniting the wound, yields when it is exposed to the pressure of the contents of the globe, and that the iris prolapses. A celebrated Dutch surgeon who, I am informed, recommends examination of the eye six hours after the extraction, also recommends, if the iris be prolapsing, to cut it off at once, and to do so as often as it continues to present itself. I wonder that his cases ever escape this accident.

The steady pressure of the plasters keeping the lid against the cornea, is the best security for good union of the wound and against prolapse of the iris. "Husband's isinglass plaster," made in Philadelphia, if neatly applied, will usually adhere without wrinkling for two or three days; then the ends get loose or curl up. Fresh plaster can be laid on over the old strips, or the old ones being soaked by warm water and carefully taken off, can be replaced by new ones without unglueing the lids. If there be much secretion flowing from the eye, it is necessary to renew the plasters sooner. In ordinary cases, three strips, three-eighths of an inch wide, hold the lids sufficiently; two laid on in an **X** shape, and a third put on horizontally just over the border of the lids. To judge of the progress of the case, it is sufficient to examine the eyelids; the degree and character of the swelling, and the frontal pain, if there be any, are indices to the state of the eye. Moderate swelling and no supra-orbital pain, show that all is well; while if the flap be sloughing, it is known by the great œdema of the lid and the dusky color of the skin; if with moderate œdema there be moderate frontal pain, an anodyne is safer than leeches; while if the pain increase and become throbbing and very severe, two or three leeches may be needed, but this is a very rare necessity. In short, the treatment of incised wounds in other parts of the body is proper also to the cornea, namely, accurate co-aptation, rest, and good nutritive power to be reinforced in the case of the cornea by all possible aids, on account of the naturally low vitality of its texture.

New Cure of Cataract.—Professor Sperino has discovered a new way to cure cataract: viz. by gradual evacuation of the aqueous humor. In consequence of this, he says, the lens gradually recovers its translucency. When the cure is not perfect, there is always amelioration. He is about to publish his cases in the *Giornale d' Ophthalmologia.—Brit. Med. Jour.*

Monument to Sir Humphrey Davy.—A monument is about to be erected to the memory of Sir Humphrey Davy at Penzance. It will consist of a granite column and base, surmounted with a statue of the great chemist, holding a safety lamp in his hand.—*Lancet.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, October 23, 1861.

DR. A. C. POST, PRESIDENT, IN THE CHAIR.

CYSTIC HYGROMA.

DR. E. KRACKOWIZER presented a *cystic hygroma*, removed from a girl three years of age. The child, when born, had a tumor, the size of a large walnut, under the right armpit, which did not cause any inconvenience, but grew gradually, until when seen October 21st, it had acquired the size of a hen's egg. It was situated on the place mentioned, filling the interstice between the pectoralis major and latissimus dorsi, reaching upwards in the axilla. The skin covering it was normal. The tumor was soft, and gave to the feel very much the impression which we have in examining a soft lipoma, or a vascular, deep-seated growth. Its surface was slightly nodular. Pressure did not diminish its size. By fixing and compressing it from all sides, it became tense, elastic, and at some points fluctuating. The diagnosis "hygroma cysticum congenitum" was made, and the tumor was removed by operation Oct. 22d. The knife was used at first, but its deeper adhesions reaching underneath the scapula and near the large vessels of the axilla, were severed partly by the finger, partly by the handle of the scalpel. Just before this was accomplished, a gush of seemingly venous blood inundated the field of operation, but its flow stopped at once. It proceeded from the bursting of the largest cyst, filled with a blood-colored liquid.

The wound was closed with five points of the twisted suture. The reaction following was normal, and the wound was soon in a state of normal suppuration. The tumor was composed of a multitude of cysts, varying in size from that of a pea to that of a hazel-nut. One cyst, situated at its base, the one which burst during the operation, when refilled, could hold easily half an ounce of water. The walls of the cysts were thin, transparent, their contents partly cherry colored, partly amber colored liquid. The cysts were held together by short connective tissues, giving to the whole mass a grape-like appearance. The structure of the cyst walls, as revealed by the microscope, consisted mainly of elastic tissue, and its inside was lined with a layer of epithelial cells, of the size and look of those which we find usually lining the walls of the smaller glandular ducts; for example, of the sudoriferous glands.

This growth is of rather rare occurrence, mainly on the neck, the sacrum, and rarer still on the thorax. I am inclined to consider it of fœtal origin. I think that the opinion of some pathologists, like Rokitansky, that they are formed by serum accumulating in the meshes of the arcolar tissue, which, then becoming more compact, constitutes the cyst walls, is refuted by the interior of the cyst walls being lined with epithelium. I think they must be considered in their origin parallel with the dermoid cysts, which more recent investigations of Lebert, Heschel, etc., have made it very plausible, always originate during fœtal life by invagination of part of the cutis as a whole under its level in the subjacent tissues.

OSTEO-SARCOMA OF SUPERIOR MAXILLA.

DR. KRACKOWIZER next presented the greater part of the right superior maxilla, removed for recurring osteo-sarcoma. I laid before the Society, said he, at its last meeting in June, the alveolar process from the first bicuspid backwards, of a young man sixteen years of age, which I removed for osteo-sarcoma June 17th. The growth then had commenced in the alveolus of the first molar tooth, which becoming painful and loose, undoubtedly by the formation of the tumor, had been drawn some months ago. The other teeth of the affected portion of the alveolar process were loosely held in the morbid mass. I stated then, that the growth had somewhat encroached on the cavity of the antrum Highmori, not by perforating it, but by pushing its mucous lining before it, its osseous walls at that point having been lost in the new formation. I present here the specimen again for comparison with the one I present this evening. Although, at the first operation, all parts left behind seemed healthy, yet I stated my misgivings that the tumor would recur. The wound healed very quickly. Where the antrum Highmori had been opened, a hole remained, giving to the voice a somewhat hollow sound. For a few weeks after the operation, I did not see any anything more of the patient. He returned October 8th, stating that about six weeks after everything had healed, a small tumor made its appearance at or near the artificial opening of the antrum Highmori, which he did not mind, until, growing larger, it prevented mastication, by coming in contact with the molar teeth of the lower jaw. He had not felt any pain whatever, and was as well as usual. When the patient opened his mouth, a tumor was seen covered with normal mucous membrane, occupying the right superior maxilla, reaching nearly to the middle of the hard palate, posteriorly and laterally, occupying the whole extent of the bone. The anterior wall of the antrum was not protruded through, nor was the orbit encroached upon. A small piece was taken from the tumor for microscopic examination, and it was found that it had retained all its characteristics. Its base was constituted of amorphous connective tissue, with a great number of irregularly interspersed free nuclei, and very few very transparent oval cells, with one large, somewhat smoky, nucleus.

The operation was performed October 17th. During the intervening time, when I saw the patient again, and the day of the operation—nine days—the tumor had enlarged not inconsiderably towards the cavity of the mouth, presenting by superficial ulceration an ashy surface, and emitting a very bad smell. An incision was carried from the angle of the mouth through the cheek, upwards and outwards to the malar bone, the flaps dissected from their natural adhesions, and turned to both sides. My original plan was to save, if possible, the floor of the orbit. A hole was therefore drilled in the line of the axis of the second incisive tooth, about three lines below the orbital margin, through which a narrow-bladed saw with a very strong back (Langenbeck's) was introduced, and a cut was carried outwards, parallel with the said margin and through the malar bone in the fossa temporalis. But it was soon clear that the growth filled the whole of the antrum, and came in very suspicious proximity and contact with its mucous lining on all points. The total removal of the maxilla was now resolved upon. A second incision was carried through the soft parts, commencing near the inner angle of the eyelids, closely hugging the ala nasi, and terminating a little outside of the palpebrum labii superioris. The flaps comprised between the two cuts were dissected and turned upwards over the eye. The connexions of the maxilla were severed from the adjoining facial bones, and a part of them were destroyed to very nearly the usual extent by means of strong cutting pliers. The insertion of the right side of the soft palate was next cut through. The tumor pressing closely on the ramus maxillæ inferioris, made it quite difficult to sever the last connexions of the mass with the processus pterigoidcus, so that it could not be avoided to remove the anterior fibres of the external pterygoid muscle. A strong arterial hæmorrhage followed the removal from the fossa spheno-maxillaris of the whole mass, seemingly from the arteria maxillaris interna, but it stood, after repeated attempts to apply a ligature to the vessel had failed, partly by pressure, partly by torsion of the artery, showing that either the arteria spheno-palatina or arteria infra-orbitalis was the source of the hæmorrhage. The edges of the flaps were now brought in nice contact by many points of the twisted suture. No hæmorrhage followed, and only a very moderate reaction, as usual in total resections of the jaw-bones. All the pins were removed on the fourth day. The union was perfect, the cicatrix on all points linear.

The specimen here presented does not show well, in a surgical point of view, from the attempt at the commencement of the operation to save the floor of the orbit. It will be seen that a soft mass has entirely obliterated the osseous structure of the body of the upper jaw-bone, as far as its lateral and posterior part is concerned. It fills the antrum Highmori completely, and has established adhesions with the mucous lining of its upper and inner wall on several points. Its microscopic characters assign it a place in the class of the soft sarcomatous growths, being closely allied to cancer. Because, while in its inferior parts it shows the structure already mentioned, specimens taken from the portion inclosed in the antrum are composed principally of cells, larger than those previously alluded to, with large, shining nuclei, the cells themselves in many instances renouncing their regularly oval shape, and becoming irregular, with one or more longer or shorter processes. That nothing diseased has been left, there is no doubt whatever; yet from the microscopic examination I do not augur a good result, and am fearful of a recurrence of the new formation.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

PLACENTA PRÆVIA.

The method of managing this unfortunate complication of labor is ably discussed in the *Glasgow Medical Journal* for July, by Dr. Charles Clay, of Manchester. As early as 1822, Kinder Wood, Esq., of the Manchester Lying-in Hospital, with whom Dr. C. commenced his own professional career, had observed cases in which the placenta attached to the os uteri chanced to spontaneously separate, immediate cessation of the hæmorrhage followed, and the placenta and child were both expelled by the unaided efforts of nature, the patients generally doing well. From these cases he inferred that by simply detaching the placenta from the os uteri by the forefinger, a large majority of cases might be left to nature for completion with far less danger than usually attends version, which is always attended with a great amount of violence, to say nothing of the extensive hæmorrhage that usually characterizes these cases. Two strong points upon which the argument is founded, are, that in all cases immediately after the detachment is effected, the hæmorrhage certainly ceases; and that the detachment can be effected as soon as one finger can be admitted, and before any great prostration can have taken place, long before it would be possible to introduce the hand with a view of version. Dr. C. has practised the same method for nearly forty years, with almost entire success. The statistical records derived from a number of sources seem to lend great weight in favor of this practice. Where version and immediate delivery are effected in cases of placenta prævia, the fatality is to the mother one in three, and to the child one in two cases. From those who have written in defence of detachment, and then leaving the case to nature—Prof. Simpson, Dr. Radford, and Dr. Clay, find the fatality to be to the mother one in forty-four, and to the child one in five cases. In all cases of detachment, according to Prof. Simpson, the hæmorrhage ceased immediately, in nineteen out of twenty cases. Dr. Clay has never known it to fail, and the only two that have not recovered, occurred at so great a distance, that loss of time and blood had produced a fatal prostration before the physician arrived to effect the detachment. The writer is inclined to believe the cases quite rare in which the placental adhesion to the os is over its entire circumference; and even where it has so adhered he has always found a weak point somewhere within the circle, from which the detachment should commence, and is effected without difficulty. The plan of boring through the placental mass with the fingers pointed to a cone, he denounces as barbarously rude and unnecessary. He also condemns repeated examinations; one, being enough to ascertain the facts of the case, should be followed by prompt and energetic means to arrest the hæmorrhage by detachment, and thus facilitate subsequent delivery by the efforts of nature. The grounds upon which he opposes the old plan of version and immediate delivery, are the heavy rate of mortality under the most favorable circumstances; the probability of means having been previously employed to check the hæmorrhage, as rupturing the membranes or giving ergot, increasing both the difficulties and dangers of the operation; the violence done in attempting to turn, when the os is but slightly dilated, and the danger on the other hand of waiting until the os is sufficiently dilated, by which time the prostration will be often so great that even the necessary efforts of version will, in very many instances, hasten death. After a somewhat severe review of an article published in the Journal for February, in which Dr. L. Roberts, of Manchester, reports three cases in which version was performed, three children sacrificed, and two women made very slow recoveries, he thus concludes:—"I have never witnessed any bad consequences from detaching the placenta; there is infinitely less violence done, the danger is much reduced, future difficulties are of less importance, and the results far more favorable; and with the accumulated facts of forty years, from individuals of the highest standing in the profession, we may safely hope never so far to retrograde as to adopt the old barbarous system of boring through the placenta, turning, and delivering the child. But even if we should be so far led astray as to accept this old barbarism, let us at least escape the opprobrium of attempting such practices in the earlier stages of dilatation of the os uteri, and *knowingly* increasing all the dangers attendant on such cases. To conclude, we must not lose sight also of the many cases who, though they may not die from the immediate effects of version and delivery, nevertheless ultimately sink from the prostrating effects of hæmorrhage, months after their confinement, notwithstanding which they were considered as cures, and may have been recorded as such."

PITTING IN SMALL-POX.

The application of the linimentum aquæ calcis for the purpose of preventing pitting in small-pox, is recommended (*ibid.*) by Dr. Joseph Bell of Glasgow. He has tried the various means used for this purpose, and found them each more or less objectionable, either in being only partially successful, or attended with more or less pain and irritation, and being otherwise, in a greater or less degree, repulsive both to the patients and attendants. The various measures hitherto adopted are—1. The puncture of the vesicle and application of the nitrate of silver, recommended by Serres, Bretonneau, and Velpeau. 2. The sulphur ointment, recommended by Midivane. 3. The mercurial ointment and plaster, recommended by Oliffe and others. 4. The tincture of iodine, by Dr. Crawford. 5. Collodion. 6. Glycerine. 7. Solution of nitrate of silver and collodion in glycerine, all of which have been attended with some degree of success, though each is attended with some inconvenience. The following are Dr. Bell's directions:—"The linimentum aquæ calcis should be poured on a plate; then masses of cotton wool, answering in size and shape to the parts to which the dressing is to be used, should be dipped in the liniment, and applied in such a manner as to completely cover the face and neck, leaving apertures for the eyes, nostrils, and mouth. The cotton should be closely matted together, so as to allow no crevice to exist, and a large handkerchief should be tied over all, having holes cut in it so as to correspond with the apertures over the eyes, nostrils, and mouth. The dressing should be allowed to remain until convalescence, and if it becomes accidentally detached at any part, it should be immediately renewed." The advantages claimed for this application, are the effectual prevention of pitting, the prevention of swelling of the

face, and mitigation of the febrile symptoms. The use of the cotton wool secures, 1st, the exclusion of air; 2d, the moderation of the local irritation; 3d, the keeping of the parts in a permanently moist state, so as to prevent the drying and hardening of the scabs. As the exclusion of air and light will completely prevent pitting in variola, the application here recommended seems well calculated not only to secure these conditions, but it also maintains a permanently moist state of the parts, removing local irritation; causes neither pain nor uncasiness to the patient, is attended with no risk, and appears preferable to other methods.

American Medical Times.

SATURDAY, JANUARY 11, 1862.

SANITARY LEGISLATION.

New York presents to the world the singular spectacle of a great city, aspiring to supremacy in population, wealth, and intelligence, yet regarding with indifference those blighting influences which delay her progress, and tend powerfully to thwart her ambition. The annual devastation of her people by loathsome diseases which she can easily prevent, the disgust which her filthy streets create in every visitor, and her fearful system of packing the laboring classes in unventilated tenement houses, give her no alarm. Heedless of her own happiness, of the good opinion of men, and of the fearful evils which afflict her population, she rushes madly towards the goal which she is destined to win only at the hazard of every interest of justice and humanity.

It seems incredible that an intelligent and Christian city could witness the annual decimation of its people by preventable diseases without putting forth every honorable exertion to apply the remedy. Yet such, in its municipal capacity, is the conduct of New York. In 1860, by careful computation, this city lost 10,496 of its inhabitants by diseases that either do not exist in the most salubrious districts, or exist only in a modified and not fatal form. The hearts of the people are wrung with anguish when a score or two of lives are sacrificed on an ill-conceived battle-field; the commanding officer is suspended from command; a military commission inquires into the minute details of his plans, and if it proves him incompetent he is dismissed from service. But New York, calmly indifferent, witnesses the annual slaughter of more of her citizens than occurs in a hundred destructive battles; no official is hurled with popular indignation from power; no searching inquiry is made for the causes of this costly sacrifice to official incompetency and neglect; but quietly the new year succeeds the old, and begins its chronicles of the same waste of human life. Scarlatina, small-pox, marasmus, and their congeners, are to-day consuming, like a devouring element, the homes of the laboring classes, without so much as an official inquiry as to the possibility of mitigating their ravages. In savage and inexorable blindness the autocrat of epidemic and pestilential diseases sits on his throne of human skulls at the City-Hall, and records with grim delight the weekly returns of his all-conquering agencies. It has been well said by one whose devotion to the sanitary condition of New York has rendered him practically familiar with the subject*:

"One of the most surprising phenomena in the political economy of this state and city, is the indifference of the people to their own death records. They either refuse to listen to, or, if they hear, they heed not, the facts concerning the dealings of death among themselves. There is no denial that the mortality of this city is much greater than that of many others of far inferior advantages for salubrity and longevity, and yet the trump of the archangel sounds in their ears in vain. Their well-cushioned officials drain them of their fat salaries, but do literally nothing in return to raise the standard of health, or check the march of pestilence. Their legislators listen year after year to the appeals in behalf of the thousands of dying infants, and when apparently moved to comply with the urgent cry for relief from the threatenings of disease and death, the demon of bribery drops a golden curtain between them and the pictures of desolate misery which have so moved them, and suddenly all assumes a rose color, and thenceforth, while their pockets are filled with sinful wealth, the cemeteries of the metropolis become populated in an increased ratio."

It is a well demonstrated fact that all the evils which now afflict the city poor are readily susceptible of removal or mitigation, and at far less expense than the city now incurs in sustaining the 138 cormorants who fatten at the City Inspector's stall. We heartily concur in the following statement of Dr. Griscom*:—"The history of Sanitary science, the practical results of the application of Sanitary measures in numerous places, and under every variety of circumstance, and the opinions of many of the soundest and most experienced practitioners of medicine and hygiene, the world over, all concur in proving that governments, in this particular, hold the lives of their subjects in their hands. It were easy to fatigue you with the recital of facts and authoritative opinions to this effect. The vast progress made in the cultivation of a knowledge of Sanitary law and its applications during the last two centuries, forms one of the most pleasing, as it is a most striking, proof of the advance of Christian civilization in modern times. We believe in the sacredness of human life, and that its unnecessary waste by neglect is but one degree lower in criminality than its wilful destruction. Every impulse of honor, of self-respect, and religious duty, should impel to the industrious use of the most enlightened public means for its preservation."

Although the body politic is blind to its own best interests, and deaf to all appeals to remedy the defects in its municipal government which bring these evils upon our city, yet New York has a band of citizens not only thoroughly alive to its sources of weakness and decay, but resolutely determined to destroy them. With untiring efforts they have endeavored to enlighten the public mind in Sanitary matters, and obtain such legislation as would relieve the city of preventable diseases. Though every measure of reform has thus far been defeated, still they have steadily gathered that strength and influence which always precede a triumph. The period has again returned when they are to renew their united efforts to obtain from the Legislature of the State the legal basis for Sanitary reform, and we rejoice that they enter upon their labors with undiminished energy and the spirit of true philanthropy.

"Though seven times defeated in their efforts to stay the progress of disease and death, their hearts fail not, nor is

* *Sanitary Legislation, Past and Future*, etc., etc. Parts of two Essays read before the New York Sanitary Association. By John H. Griscom, M.D. New York. 1861.

their determination abated. Nor though seventy times seven should the enemies of this holy cause succeed, by bribery and corruption, in postponing the day for the inauguration of the most valuable of all the reforms known amongst men, will its votaries lay aside their armor, or cease to contend for the faith which animates them with the assurance of final success. Though, like the disciples of Him who went about healing all manner of disease, and unlike them who have thus far betrayed the people to their destruction, they carry neither purse nor scrip, the friends of Sanitary Reform in this city will never cease to show the public their true interests in this matter, and demand of their legislators the abolition of the official nuisances which are the only obstacles to the removal of those physical nuisances, under whose foul influences so many thousands find untimely graves."

THE WEEK.

An interesting question was sprung during a recent debate in the Academy of Medicine, Paris, on Excision of the Hip-Joint, relating to the hygienic condition of the English and French hospitals. Malgaigne stated that of 100 persons operated on, 56 die in Paris, and 30 in London. In amputations for pathological causes, as amputation of the thigh, there are 60 per cent. deaths in Paris, 21 in London, and 19 in Massachusetts. The correspondent of the Lancet says:—

"M. Malgaigne, in answering the defence put forward by the ex-chief of the Assistance Publique, after reminding his contradictor of the occurrence of the *peut-être* in his original charge, had recourse to figures, and showed how that in the Paris hospitals, out of 512 amputations of the thigh, 289 had been followed by death, giving an average of 56 fatal results for 100 operations; how that out of 15 cases of trephining, 15 deaths had occurred; and out of 220 operations for strangulated hernia, 133 had proved fatal;—whereas in London the average in the first case was 21 per cent. in lieu of 56; and in the last, 50 per cent. instead of 60, as at Paris, etc.; and he therefore thought the fact indisputable that the mortality of this capital far exceeded that of London, and, as a practical conclusion, ventured to suggest that in future the number of beds in each ward should be far more limited than at present, and that hospitals should be henceforward better ventilated, so that the number of infectious foci, of which each bed represents one, should be reduced to a minimum."

—

The death of Prince Albert by typhoid fever is the subject of the leading articles of the London medical journals of Dec. 21. From these articles it appears that the attack occurred at least a fortnight before the fatal termination; on the following day Dr. Jenner was called in consultation with his regular medical attendant Sir James Clark, and subsequently Dr. Watson and Sir Henry Holland were added. The immediate cause of death was pulmonary œdema. The question is raised, "Where did the Prince contract typhoid fever?" The town of Windsor, in the immediate neighborhood of the Castle, had a severe visitation of typhoid fever in 1858, attributable to imperfect drainage. Dr. Murchison, who first traced typhoid fever to putrid emanations, especially from sewers, and who gave it the name of pythogenic, or dirt, fever, made this investigation with Mr. Simon, health officer of London. They reported the town in an extremely filthy condition, and readily found the causes of the prevailing fever. Since the death of the Prince, the sanitary condition of the Royal Palace has been carefully examined by a competent person, who concludes that "unless some dirc and unsuspected source of danger should lurk in the Royal apartments themselves—ample and well ventilated as they apparently are—the sewerage system of the Castle must be acquitted of all share in the mischief." The *British Medical Journal* pertinently adds:—

"If, however, as we may fairly conclude, the Castle itself contain no *foci* of pythogenic effluvia, still what a lesson is taught by this deplorable fact! The personal security of the wealthiest and the highest requires that the sanitary condition of the masses—of the community—must be cared for. It is not enough that we each, in our own narrow limits, should be contented with an obedience to the laws of hygiene. That fell matter which is generated beyond the personal domain of royalty can find its silent way, like the pestilence which walketh by night, through sentinels and barred doors into the very bosom of Royalty itself! Sincerely do we trust that the striking moral to be drawn from this tale may be turned to practical advantage throughout the kingdom."

—

The London *Lancet* is about to publish a series of papers prepared by a commission, on the Influence of Railway Travelling on Public Health. The inquiry embraces the following inquiries:—

"The Influence of Railway Travelling on Health—1. As affected by the Ages and Occupations of Individuals. 2. In Healthy Persons. 3. In Unhealthy Persons, and those subject to Special Diseases—*e. g.* Diseases of the Heart and Circulatory System; Brain and Nervous System; Hollow Viscera (as Hæmaturia); Throat; Eyes, etc. 4. In Females: when Pregnant, or subject to Uterine Disease. 5. In Persons peculiarly susceptible to Sea-sickness. 6. In Regular Travellers—*e. g.* Residents in the Country coming to large Towns (*season-ticket holders*); Travelling Railway Officials; Travelling Clerks of Post Office, etc.; Commercial and other Travellers. 7. In Occasional Travellers. 8. The Effects on certain Constitutions of hurry and anxiety to catch Trains. 9. The Results of prolonged Retention of the Secretions. 10. The Effects on the Spinal Cord, etc., of Continued Jolting—that is, a series of slight Concussions. 11. The Cerebral and Visual Effects of rapidly passing objects, and of reading in moving Carriages. 12. Any Differences resulting from the use of 1st, 2nd, and 3d Class Carriages. 12. Accidents, and especially their Secondary Effects."

Reviews.

A Lecture. By D. Hayes Agnew, M.D., Surgeon to the Philadelphia Hospital; Lecturer on Anatomy, etc. Published by the Class. Philadelphia: Lindsay & Blakiston. 1861. Pp. 59.

The subject of this agreeably written lecture is the life of Baron Larrey. The talented author has given a minute sketch of the military career of this distinguished surgeon, which will be read with interest. We cannot withhold the following narration of the last military acts in the life of this eminent surgeon:—

"For the person of Bonaparte, Larrey entertained the most complete attachment; and it may be said, this feeling was warmly and sincerely reciprocated on the part of the Emperor. When he went to Elba, Larrey desired to be his companion in exile, and received from Napoleon a reply which showed that he loved France more than his own comfort. 'It is not without regret, Monsieur Larrey, that I separate myself from you. You belong to the army, and it is your duty to follow it.' When Napoleon returned from Elba, in 1815, Larrey was the first to meet and welcome his old commander and friend; and with an

eagerness and warmth, which drew from the returned exile the feelings of his heart. 'Continue,' says he, 'your labors, Monsieur Larrey, I hope yet to gain an opportunity of repaying the sacrifices you have made, and the services which you have rendered to our wounded soldiers.' And again, at a distribution of colors to the Deputies, from the departments who were commissioned to welcome Napoleon back to France, and on receiving the flag for the department of the 'Hautes Pyrénées,' he transferred it to Larrey to present to the President of the deputation, saying, 'Gentlemen, it affords me unfeigned pleasure to present you these colors, through your compatriot Larrey, who honors humanity by his disinterestedness and his courage. We are indebted to him for having saved a large number of our soldiers in the deserts of Lybia, by giving them freely of the little pure water and spirits which had been reserved for his own use, and of which he himself stood in the greatest need.' Indeed, from that day until the disaster of Waterloo, Larrey was the constant companion of the Emperor. On the eve of that great battle, one of his last acts of friendship was an attempt to dispel the shadows of coming misfortune which had already cast a gloom over the mind of Napoleon. During its progress he was not idle for a single moment; operating upon the field, while the carnage was going on, and passing even among the combatants engaged in active mortal strife, to carry, with his flying ambulances, the unfortunate soldier or officer from the ground. But the star of Napoleon was eclipsed; and when Larrey was informed that the French were actually retreating, then only did he think of himself. Even in this hour of extremity his commander did not forget him; urging, through one of his aides, the necessity for a retreat, and directing, in order to secure his personal safety, that he should attempt to gain the frontier by a route which he indicated. It was during this flight that another feature appears in his character to make up the hero. After travelling for one or two leagues with his companions, they were suddenly intercepted by a corps of Prussian lancers. Determined to force his passage, he placed himself at the head of his little band, fired both his pistols into the ranks of the opposing party, and opened a path through which they passed at full gallop. They had passed some distance, when a bullet having entered his horse, the animal fell under him, and before he recovered from the shock, he received on the head and shoulder a double sabre wound, which rendered him insensible. Thinking him dead, the Prussians followed his servants and companions, most of whom they either wounded or took prisoners. After his consciousness was restored, he was able to mount his horse, which had likewise regained his feet, and direct his course through by-ways and corn fields, and had succeeded in reaching the banks of the Sambre, when he was surrounded by another corps of the same army and was obliged to surrender. He was disarmed and deprived of nearly all his clothes; the officers distributed among themselves the contents of his purse, taking his arms, ring, and watch. His figure, and the grey surtout which he wore, resembling those of the Emperor, they were under the impression they had possession of that personage. Securing him to another general officer of rank, and afterwards discovering their mistake, they determined to have him shot. For this purpose he was led out, and when in the very act of being fired upon, he was recognised by the Surgeon-major of the regiment, through whose solicitation the consummation of so barbarous an act was suspended, and an order given to conduct him to General Bulow, the Provost-marshal of the allied armies. This officer having seen him at Berlin, at once recognised him as the distinguished surgeon, and was by no means insensible to his condition, as he was then almost naked, his feet entirely bare, his hands tied behind his back, and his head covered with bloody bandages. Ordering his cords to be removed, he was sent to Blücher, General-in-chief of the hostile armies. To him Larrey was personally known, having saved the life of his son during the Austrian campaign. The Marshal treated him with kindness, and after inviting him to breakfast at his table, he presented him with a sum of money, and afterwards caused him to be conveyed to Louvain, where, from some misunderstanding, he was placed in the house of a poor woman, and while drinking his bowl of onion soup, was again recognised by a young medical officer, who, on seeing him, exclaimed in amazement, 'You are Baron Larrey,' and taking to his heels hastened to make known the fact to the municipality, whereupon he was soon taken to the house of the distinguished professional men in Louvain, from whom he received the kindest proofs of friendship and care. By permission from the commander of the allied powers, he returned to Paris to the society of his family. But now how changed! His long intimacy and association with the Emperor rendered him an object of distrust. From every office and post of honor, over which the government exercised jurisdiction, was he removed, being only retained as surgeon to the hospital of the Guard, thus reducing him to comparative poverty. Among his other misfortunes was the death of an aged and venerated mother, who sank under a pressure of grief, from the erroneous announcement that her son had fallen a victim to his wounds at the battle of Waterloo; and following this event, was the demise of his brother, a surgeon at Nimes. So extreme had become his resources, that it is creditably related he contemplated, at the request of many friends, a removal to the United States. Strong in his attachments, he could not, however, leave France; and although solicited by the Emperor of Russia, and Don Pedro of Brazil, to take charge of their armies, with the most flattering offers of emolument and rank, he remained firm to his purpose. It was during this period of poverty and melancholy he prepared for the benefit of the world, his fourth volume, containing the campaigns of Russia, Saxony, and France. In 1818, his pension of 3000 francs was restored to him, by au act of the Chamber of Deputies. In 1821, the news of the death of Bonaparte was received, and among all the thousands who mourned the event, there were none who more deeply felt than Larrey. As usual, Napoleon had not forgotten him, eveu in death, but spoke of him to those around, as the most virtuous man he had ever known, and as a substantial proof of his regard bequeathed to him one hundred thousand francs. In 1826, by permission of the King and the Minister of War, accompanied by his son, he visited England, Wales, Ireland, and Scotland, where he was received with every mark of respect and distinction becoming his character and position.

"On his return to Paris, he assumed his duties as surgeon-in-chief and Medical Inspector-General, which he had received after the death of Napoleon. In 1830, at the breaking out of the Revolution, his services were again called into active requisition, and performed in so important and satisfactory a manuer, as to receive, on the accession of Louis Philippe, the 'medal of July.' After this event, he, at the request of the king of the Belgians, visited that country, making a thorough organization of all the military hospitals and ambulances. His report was followed by a flattering letter with the king's autograph, accompanied by a gold snuff-box, on which were inscribed the initials of his Royal Highness in brilliants. In 1834, by permission from the war department, he visited the south of France, and which was to him a tour of much interest and pleasure. He stopped for a time at the place of his birth, and meets, among others, the preceptor of his tender years, the Abbé de Grasset, an old man over ninety years; and in almost every village through which he passed, was he recognised by the crippled remains of the Old Guard, who, overjoyed at the sight of his venerated person, came forth, some without arms, and others on their wooden pins, to do homage before his presence, following his carriage for miles, that they might catch a glimpse of his face. In 1835, he returned again from the south of France, where he had, at the request of the Minister of War, spent some time in visiting the hospitals, in consequence of the prevalence of the cholera, and to whom he presented a detailed and valuable report. In 1840, when the mortal remains of Napoleon were brought home to France, Larrey participated in the formalities attending that great funeral pageant, which he and his associates designated as their 'last campaign.'

"Having a wish to visit again the camp, in 1842 he obtained from Marshal Soult, the Minister of War, an order to visit Algeria, and inspect the hospitals of the French there established. Accompanied by his son, he left Paris, and accomplishing the object of his mission, was on his way home, when he was attacked with pneumonia, and expired at Lyons, on the 25th of July, aged 76 years. His remains were taken to Paris, and on the day when they were deposited in the vault gratuitously prepared by the authorities of Paris, a vast concourse collected to testify their respect for this great man, among whom were the members of the Academy of Sciences, the Society of Medicine, the civil and military authorities, the ancient soldiers of the Empire, and numbers of distinguished citizens. 'If ever,' said Napoleon, 'the military erect a statue, it should be to Baron Larrey, the most virtuous man I have ever known.' Posterity is not insensible to the claims of genius, and already two monuments have arisen to the memory of Larrey; one in 1850, in the court of the Val-de-Grâce hospital, and the other in the hall of the Academy of Medicine."

THE PLACENTA, THE ORGANIC NERVOUS SYSTEM, THE BLOOD, THE OXYGEN, AND THE ANIMAL NERVOUS SYSTEM, PHYSIOLOGICALLY EXAMINED. By JOHN O'REILLY, M.D., Licentiate and Fellow of the Royal College of Surgeons in Ireland, etc., etc. New York: S. S. and W. Wood; London: Churchill. 1861. Pp. 204.

THE subjects embraced in this publication are among the most important which now engage the attention of the advanced students of physiological science. With them we involuntarily associate the names of Brown-Séquard, Dalton, Bernard, and others not less distinguished, and yield them the homage due successful pioneers in the thorough cultivation of hitherto unexplored fields. Dr. O'Reilly is evidently an enthusiastic student in whatever department of medical science he directs his inquiries. He chooses by preference the most abstruse subjects, and brings to their investigation experimentation, observation, and ratiocination. To give the various questious which the author has brought forward, and subjected to critical analysis, a complete examination, would be a task for which we have neither time nor space. Nor would such review profit the reader who has access to Dr. O'Reilly's work. It embraces a mass of propositions, experiments, and conclusions, which no one can properly appreciate without carefully perusing the work itself. The author has done a good service by giving to his various publications this permanent form.

PROCEEDINGS OF THE PATHOLOGICAL SOCIETY OF PHILADELPHIA.. Vol. I. Philadelphia: J. B. Lippincott & Co. 1860. Pp. 307.

THE Philadelphia Pathological Society was organized Oct. 14, 1857, and as the result of four years' labors has put forth a volume respectable in size, and replete with matter of the highest practical interest. Some of the reports are very elaborate, as that on *Cancer of the Pancreas* by Dr. Da Costa, which contains a table of thirty-seven carefully prepared cases. The Pathological Society of Philadelphia has set an example to its sister societies which we trust will not be unregarded.

THE GORILLA; being a Sketch of its History, Anatomy, General Appearance, and Habits. By LEONARD J. SANFORD, M.D. (Read before the Connecticut Academy of Arts and Sciences, Dec. 18, 1861.) From the American Journal of Science and Art.

THIS reprint contains an anatomical description of the Gorilla, based on the facts brought forward by the American traveller Du Chaillu.

Correspondence.

TREPHINING IN EPILEPSY—CURE; PARALYSIS OF THE PORTIO DURA.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—John Tobin, æt. 28, common laborer, possessing a model physical organization. Two years this coming January, he received a blow on the side of the head, fracturing and depressing the anterior inferior angle of the parietal bone. He had suffered from spasms of an epileptic character as described to me, at intervals as short as a day or two, and rarely three weeks. Cramps of the upper extremities, and especially along the course of the ulnar nerve, were very distressing, as well as a general numbness throughout. He had great difficulty in articulating, and as the friends said, was gradually growing demented. In the midst of a sentence in his narrations he would stop and take up another point, as well as pursue his common avocations irregularly; and this condition of things gradually increased until he could no longer be trusted in his daily pursuits.

He applied to me, and trephining was advised, and on the 9th of September I operated. The depression in the external table was of a diameter of an inch and a half. I applied a large-sized instrument, removing a portion of bone near an inch in diameter, having a spine of near a quarter of an inch in length projecting from the under surface, that had imbedded itself in the dura mater and substance of the brain, forming a pit in size and shape, much resembling that produced by a grain of coffee. The venous hæmorrhage was very profuse from between the tables, from some abnormal distributions resulting from the fracture. He was walking about in two weeks, and has had no spasms since the operation, save from the accumulation of blood and pus within the first few weeks, that gave rise to light ones. The difficulty in his speech was immediately relieved, while the cramps and numbness slowly subsided, and his mental incoherence he has perfectly recovered from. I saw him a day or two since, and upon inquiry as to his well-being, "*First-rate,*" was given in reply. In proof; he had assumed his accustomed duties. I look upon the operation as being attended with the most satisfactory results, more so than usually succeeds after the lapse of time that has occurred in the above case.

Miss B——, æt. 18, healthy, of nervo-lymphatic temperament, was surprised to find her mouth crooked, as she described it. Four days after, when she came to consult me, when she would smile the molars upon the left side were more easily seen than the incisors, for the lips posteriorly were separated. In a word, her mouth was upon the side of her face, and her nose was fast travelling the same road. She claimed to be in perfect health, but upon close inquiry remembered to have felt slight pain in the region of the mastoid process of the right side about the first day. Her hearing was in nowise interfered with, leaving us to infer that the portio dura was alone involved, in spite of the intimate relation with the portio mollis. This condition of things succeeded a fright by an intoxicated brother. To an antiphlogistic course it slowly yielded, restoring perfect symmetry again to her face.

Yours, etc.,

FAIRFIELD, Greene Co., O.
Dec. 11th, 1861. J. T. READ, M.D.

Medical News.

HOSPITALS OF ROME.—The hospitals of Rome are numerous, and are for the most part kept very clean. La Consolation is destined for the reception of accidents, and contains sixty-two male and twenty-four female beds. The Hospital of St. John Calabita has fifty beds, and is for the reception of those whose complaints are trivial and short. The Hospital of Saint-Gallican, an ancient leper-house, is devoted to skin-diseases, and takes in sixty males, sixty females, and thirty children. The Hospital S. Salvatore is for women suffering from fever, scorbutic and chronic diseases. It receives annually about three thousand patients. The mortality there is great, the air being unhealthy. The students do not attend these hospitals. The Sisters of St. Vincent de Paul perform the minor operations and dressings. The Hospital Saint-Roch is for lying-in women. There is one ward of twenty beds, and many small rooms, etc. The facility of admission here is very great. No questions are asked. The woman takes a number on entering, and, even if she dies, may remain unknown. She can enter veiled, and remain so. This hospital is also closed to students. The Military Hospital receives annually about sixteen hundred sick. St. James's Hospital contains surgical cases, male and female. It has three hundred and eighty-four beds, and receives about two thousand patients. It is kept in excellent order; but the mortality is very great, being about eleven per cent.

There are in it two clinical wards, a fine amphitheatre, and *post-mortem* and dissecting rooms, a museum of pathological anatomy, etc. The Hospital of the Holy Ghost is the largest of all; it will hold two thousand male patients affected with internal diseases. Only six women are admitted into a small clinical ward. All febrile diseases are admitted, without any form or restriction as to age condition, country, or religion.—*Brit. Med. Jour.*

A Joke in a Russian Hospital.—A singular development of Russian discipline is stated by a recent writer as having been witnessed by him during a visit to the military hospital at Riga. The head physician, a German practitioner, described the difficulty which he found in eliciting from the men the real seat of their complaints, as every ailment in the upper part of the body, whether in the head, back, or stomach, they call pain in the heart, and those in the lower parts of the body pain in the leg. Having arrived at the hospital, all the patients that were able to do so arranged themselves in a row, dumb and stiff as if on military parade. "How do you do to-day, old man?" asked the doctor of the first. "My heart pains," was the expected timid reply. "Tongue out," said the doctor, and out it was. Turning to the next, the same question, same reply, and same tongue operation. More than thirty in the row underwent the same medical inquiries and process. When about leaving, the head physician desired his visitor to look round. There stood the whole file in military attitude, with their tongues out. "We looked on for a while," continues the writer, "when the doctor loudly gave the word, 'Tongues in,' and all the articulating organs vanished in an instant. My risible faculties were so excited by the ludicrous scene, that it was some moments after we were in the open street ere I could, rather reproachfully, ask my friend how he could play such a trick on the poor fellows. 'You must not judge,' said he, 'by exceptions. I merely wanted to show you to what extent the blind spirit of discipline prevails among the Russian troops. Nor are the fellows,' added he, 'the worse for the joke; on the contrary, they believe that the cure is greatly promoted by keeping the tongue out in the presence of the doctor—the longer the better.'"—*Lancet.*

Adulteration of Pickles, Bottled Fruits, and Vegetables.—From an examination, it appears:—That of *seven* samples of *greengages* examined, *four* were colored with *copper*, while *three* were uncolored and free from that metal. That of *five* samples of *gooseberries* analysed, *three* contained much *copper*, and in *two* only was it absent. That a sample of *rhubarb* also contained *copper*. That of *ten* samples of *Pickles*, including *French beans*, *gherkins*, *mixed pickles*, and *West India pickles*, *copper* was found in *seven*, and but *three* were uncontaminated with that metal. That of *five* samples of *preserved peas* tested, *two* contained *copper*. That of *four* samples of *French* or *haricot beans*, *three* were highly colored with that metal, which was also largely present in a sample of *mixed vegetables*. Thus of *thirty-three* samples analysed, *copper* was present, frequently in considerable amount, in no less than *twenty-one* of the samples, or in *nearly two-thirds*.—*Lancet.*

New Method of giving Chloroform.—At a recent meeting of the Obstetrical Society, Dr. Simpson described a plan of administering chloroform which he has now adopted in preference to that at present in use here. The present mode is to fold up a handkerchief and pour into the hollow a quantity of chloroform, and then hold it at some distance from the face, so as to admit of atmospheric air being inhaled along with the vapor. The new plan is to lay a single layer of handkerchief over the face, and let the chloroform fall on it drop by drop. The advantages are these:—1. That there is less danger to the patient from the smaller quantity applied at a time. 2. That anæsthesia is more speedily produced. 3. That the quantity of chloroform required is less. Various gentlemen who had made trial of the plan confirmed the value of this process; and Dr. Young in particular stated that he had kept a patient narcotized for ten hours with two ounces and a half of chloroform.—*Brit. Med. Jour.*

On Arsenious Acid, in large Doses, in Fever, a substitute for Quinine.—Mr. Turner has employed arsenious acid for twenty years in the treatment of intermittent fevers, and, on account of the great drain upon the cinchona tree, and his strong opinion as to the equal, if not greater, value of arsenious acid in the above-named diseases, he now brings the results of his experience before the Profession. He considers the fears of an inconvenience or danger arising from the remedy as much exaggerated. Mr. Turner's success was so marked that in 1860 the Director-General stated that Mr. Turner should be thanked for "drawing the attention to his successful treatment of intermittent fevers by large doses of arsenic, and steps should be taken by circular to urge an extended trial of this remedy, and reports requested." The course usually adopted by the Author was to give the arseniate of potash as in the following prescription:—℞ Liq. potass. arsen., tr. cardam. co., ana ʒ ss; mucilag. acac., ʒ ij; mist. camph. vel aquæ, ʒ ss. M. To be given every second hour four or five times, the last to anticipate the expected paroxysm at least two hours.—*Read before the R. M. and S. Society of England.*

Honors to Prof. Syme.—That honors seldom come single has proved true in the case of our very eminent professor of clinical surgery, who has within the last few months been selected for honor by three European monarchs: first, by the King of Denmark, who created him a knight of the order of Danebrog; second, by the Emperor of the French, who made him a chevalier of the Legion of Honor; and lastly, by our own Queen, who has appointed him her surgeon in ordinary for Scotland.—*Brit. Med. Jour.*

Death of Dr. Southwood Smith.—This eminent sanitarian died Dec. 10th, of bronchitis, in his 73d year. Dr. Smith was the author of several works, all of which passed through many editions. He was for many years physician to the London Fever Hospital, and the results of his experience were embodied in a work on fever. His reports on quarantine cholera are very valuable.

At the meeting of the Academy of Medicine, Jan. 3, the following officers were elected:—Dr. H. D. Bulkley, Vice-President; Dr. J. H. Hinton, Recording Secretary; Dr. J. G. Adams, Corresponding Secretary; and Dr. J. O. Pond, Treasurer.

Prof. Austin Flint, Jr., has been appointed microscopist to Bellevue Hospital. Dr. Wm. H. Thompson has been appointed Clinical Registrar to the same institution.

Vermont Asylum for the Insane.—From the twenty-fifth annual report of the officers of this institution, located at Brattleboro', we learn that it is in a highly satisfactory condition. The health of the inmates appears to have been more than ordinarily good, and the recoveries have been numerous. From the report of the superintendent, it appears that 576 patients enjoyed the benefits of this institution the past year. There were 436 remaining at the commencement of the year; 140 have been admitted; 138 have been discharged; and 438 now remain, of whom 230 are males, and 208 are females. Of those discharged, 56 recovered. Since the opening of the Asylum, 3308 have been admitted, and 2870 have been discharged. Of the 2870 discharged, 1547 have recovered.—*Boston Med. Jour.*

Report of Deaths in the City and County of New York, for the week ending the 6th of January, 1862. Men, 88; Women, 75; Boys, 114; Girls, 105. Total, 382. Adults, 163; Children, 219; Males 202; Females, 188; Colored Persons, 2. The leading causes of death were: bronchitis, 15; infantile convulsions, 29; croup, 15; diphtheria, 6; scarlet fever, 47; typhoid fever, 5; typhus, 5; pneumonia, 23; small-pox, 10; consumption, 64; dropsy in head, 15; infantile marasmus, 12. There was an increase of five over corresponding week of last year, and a decrease of 23 as compared with last week.

MEDICAL DIARY OF THE WEEK.

Monday, Jan. 13.	New York Hospital, Dr. Peters, half-past 1 P.M. Bellevue Hospital, Dr. Thomas, half-past 1 P.M.
Tuesday, Jan. 14.	New York Hospital, Dr. Watson, half-past 1 P.M. Bellevue Hospital, Dr. Loomis, half-past 1 P.M. Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
Wednesday, Jan. 15.	New York Hospital, Dr. Cock, half-past 1 P.M. Bellevue Hospital, Dr. Sayre, Is. Hos., half-past 1 P.M. Academy of Medicine, half-past 7 P.M.
Thursday, Jan. 16.	New York Hospital, Dr. Peters, half-past 1 P.M. Bellevue Hospital, Dr. Taylor, half-past 1 P.M. Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
Friday, Jan. 17.	New York Hospital, Dr. Watson, half-past 1 P.M. Bellevue Hospital, Dr. Flint, half-past 1 P.M. Eye Infirmary, Dr. Noyes, half-past 1 P.M.
Saturday, Jan. 18.	New York Hospital, Dr. Cock, half-past 1 P.M. Bellevue Hospital, Dr. Wood's Clinic, 1 P.M. Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICES.

The New York Academy of Medicine.—Dr. Conant *will read a paper before the Academy, Wednesday Evening, January 16th, "On the Science, Causes, and Anatomical Characteristics of Human Monstrosities."*

To Physicians. A Physician in good practice, of more than ten years' standing, in the city of Brooklyn, N. Y., who has a business of value, but whose failing health makes another climate desirable, would like to negotiate with respectable parties having means at command, for the transfer of the good will of his business. Further particulars may be obtained upon application at No. 124 Dean street, Brooklyn, at any time between 7 and 9 o'clock P.M.

Rensselaer Polytechnic Institute, Troy, N. Y.—The seventy-sixth semi-annual session of this Institution for instruction in the Mathematical, Physical, and Natural Sciences, will commence Feb. 19th, 1862. A full course in Military Science is now in progress.

Further information, with the Annual Register, can be obtained of Prof. Charles Drowne, Director.

To Physicians.—Timolat's Old Established SULPHUR AND VAPOR BATHS. Introduced in 1820 by L. J. Timolat, from Paris, at No. 1 Carroll Place, Bleecker street, corner of Laurens street, New York. Given daily by A. L. TIMOLAT & CO.

BOOKS
ON
MILITARY SURGERY.
FOR SALE BY
BAILLIERE BROTHERS
440 BROADWAY.

Sent Free by Mail on Receipt of the Price.

JUST RECEIVED, COMPLETE COLLECTIONS OF THE ENGLISH GOVERNMENT REPORTS ON THE MILITARY MEDICAL DEPARTMENT, VIZ.:

Medical and Surgical History of the British Army, which served in Turkey and the Crimea during the War against Russia in the years 1854-5-6. 2 vols. 4to. London, 1858. $12.50.

Report of the Commissioners appointed to inquire into the regulations affecting the Sanitary Condition of the British Army, the Organization of Military Hospitals, and the Treatment of the Sick and Wounded; with Evidence and Appendix. 4to. London, 1858. $10.

Report of the Proceedings of the Sanitary Commission despatched to the Seat of War in the East, in 1855-56. 8vo. London, 1857. $4.

Statistical, Sanitary, and Medical Reports of the British Army, for the year 1859. London, 1861. $2.50.

General Report of the Commission appointed for Improving the Sanitary Condition of Barracks and Hospitals in the British Army. Folio. London, 1861. $2.50.

As these Reports are now difficult to be procured, intending purchasers are requested to make early application for them.

Armand, Histoire Medico-Chirurgicale de la Gnerre de Crimée. 8vo. Paris. $1.85

Baudens.—La Guerre de Crimee, les Campements, les abris, les ambulances, les hopitaux, &c., &c. Second edition, 12mo. Paris, 1858. $1.

Bertheraud.—Campagne d'Italie de 1859. Lettres Medico-Chirurgicales écrites dn Grand-Quartier général de l'armée. 12mo. Paris, 1860. $1.00.

Bertheraud. Campagnes de Kabylie. Histoire Medico-Chirurgicale des Expeditions de 1854, 1856, and 1857. 8vo. Paris, 1862. $1.80.

Boudin.—Resumes des dispositions legales et reglementaires qui president aux operations medicales du recrutement, de la reforme et de la retraite dans l'armée de terre. 8vo. Paris. 50 cts.

Boudin.—Systeme des Ambulances des Armées Francaises et Anglaises. 8vo. Paris. 87 cts.

Boudin.—Souvenirs de la Campagne d' Italie. 8vo. Paris. 75 cts.

Cazalas. Maladies de l'Armee d'Orient. Campagne de 1854-55-56. 8vo. Paris, 1860. $1.25.

Fraser. A Treatise upon Penetrating Wounds of the Chest. 8vo. London, 1859. $1.60.

Gross, S. D.—A Manual of Military Surgery; or, Hints on the Emergencies of Field, Camp, and Hospital Practice. 24mo. Philadelphia. 50 cents.

Guthrie.—Commentaries on the Surgery of the War in Portugal, Spain, France, and the Netherlands. With Additions relating to the War in the Crimea. 8vo. London. $4.65.

Hamilton, F. H.—A Practical Treatise on Military Surgery. Fully illustrated. 8vo. New York: 1861. $2.

Jacquot. Du Typhus de l'Armee d'Orient. 8vo. Paris, 1858. $1.87.

Notes on the Surgery of the War in the Crimea, with Remarks on the Treatment of Gunshot Wounds. By George H. B. MacLeod, M.D. Philadelphia, 1861. $1.50.

On Fractures of Bones and Resection in Gunshot Injuries. By Dr. Louis Stromeyer. 8vo. London. $1.87.

Outlines of Military Surgery. By Sir George Ballingall, M.D. 5th edition, 8vo. London. Price $4.00.

Saurel.—Traite de Chirurgie Navale, suivi d'un resumé de Legons sur le service chirurgical de la flotte, par le Dr. J. Rochard. 8vo. Paris, 1861. $2.10.

Scrive. Relation Medico-Chirurgicale de la Campagne d'Orient. 8vo. Paris, 1857. $2.00.

Tripler & Blackman.—Hand-Book for the Military Surgeon. 12mo. Cincinnati. $1.

Warlomont. L'Opthalmie Militaire à l'Academie Royale de Medecine en Belgique. 8vo. Bruxelles. $2

Williamson.—Notes on the Wounded from the Mutiny in India. With a Description of the Preparations of Gun-Shot Injuries contained in the Museum at Fort Pitt. 8vo. London. $3.75.

FOREIGN MEDICINES, AND Druggists' Articles.

GAUDELET & GOURÉ,

IMPORTERS & COMMISSION MERCHANTS,

32 Platt St. NEW YORK. 32 Platt St.

IMPORTATION ON ORDER OF Foreign Perfumery AND *Druggists' Articles*

ALBESPEYERS—Epispastic Paper.
do Blistering Tissue.
do Issue Paper.
ANDURAN—Anti-gout Wine of Anduran.
AUBERGIER—Syrup of Lactucarium.
do Paste of Lactucarium.
AYMES Licorice Drops, Violets perfume.
BARRESWILLE—Tannate of Quinine Pills.
do do do Lozenges.
do do do Powder.
BELLOC—Vegetable Charcoal Powder.
do do do Lozenges.
BERAL—Tartrate of Potash and of Iron.
do Citrate of Iron.
do Carbonate of Iron.
do Citrate of Iron and of Quinine.
do Lactate of Iron.
do Iron reduced to Hydrogen.
do Officinal Chalk without odor.
do Drages of Lactate of Iron.
do Ferrugineous of Nancy for Rusty Water.
do Lozenges of Citrate of Iron.
do do of Lactate of Iron.
lo Saccharine of Citrate of Iron for Rusty Water.
do Syrup of Citrate of Iron.
do Syrup of Iodide of Iron.
do Poor Man's Plaster.
BERTHE—Cod Liver Oil.
do Syrup of Codeine.
BILLARD—Crcosote.
BLANCARD—Pills of Iodide of Iron.
do Syrup do do.
BONJEAN—Drag6es of Ergotine.
BOTOT—Tooth Water.
do Tooth Powder.
BOUDAULT—Anti-Dyspeptic Pepsine.
do Additional Pepsine.
BOYVEAU—Rob Boyveau Laffecteur.
BRIANT—Syrup Antiphlogistic.
BROU—Injection.
BUGEAUD—Balsam for the Nerves.
CASHOO of Bologne.
CAUVIN—Digestive Pills.
CHABLE—Injection.
do Syrup of Citrate of Iron.
do Depuratif Vegetal.
do Mineral Bath.
do Perfumed Bath.
do Toilet Water for Ladies.
do Anti-Tetter Pomatum.
do Pomatum for Piles.
CHARLES ALBERT—Bol of Armenie.
do Wine of Armenie.
CLERAMBOURG—Golden Pills.
do Grains of Life.
do Congh Syrup.
do Paste.
CLERET—Iodide of Potassium Rob.
do Pills of Iron and of Quinine.
CLERTAN—Pearls of Ether.
do do Chloroform.
do do Assafœtida.
do do Castoreum.
do do Digital.
do do Valerian.
do do Ess. of Turpentine.
COLTAS—Benzine in Bulk.
do Drages of Santonine.
COURCELLES—American Elixir.
CROSNIER—Syrup Mineral and Sulphurous.
do Pills of Iodide of Iron and of Quinine.
DAROLLES—Rum Punch.
DEGENETAIS—Pectoral Paste.
do Syrup of Calf Lungs.
DEHAUT—Purgative Pills.
DELABARRE—Toothing Syrup.
DELANGRENIER—Nafé Paste.
do Syrup of Nafé.
do Racahout des Arabes.
DESBRIERES—Magnesia Chocolate.
DICQUEMARE—Melanogène (hair dye).
do Fixateur (for the hair).
DORVAULT—Horse Radish Syrup.
DUPONT—Regenerator.
do Anti-Glairons Elixir of Guillie.
DUSOURD—Ferruginous Syrup.
EAU—De Melisse des Carmes.
ESPIC—Pectoral Fumigator.
FAYARD—Paper.
FLON—Lenitive Syrup.
FORGET—Congh Syrup.
FRANK—Grains of Health.
GAFFARD—Granules of Digitaline
do do. of Atropine.
GARNIER LAMOUROUX—Sugar-Coated Pills.
GAUTIER-LACROZE.—Syrup of Aconite.
do Balsam of Aconite.
GELIS & CONTE—Drag6es of Lactate of Iron.
GENEVOIX—Iron reduced by Hydrogen.
do Anti-Gout or Oil of Horse-Chestnut.
do Drag6es of Iron reduced.
GEORGE—Pectoral Paste.
GILLE—Drag6es of Proto-Iodide of Iron.
do Depuratives Dragees of Lepetit.
do Syrup Proto-Iodide of Iron.
GUERIN—Balsamic Opiat.
GUILLIE—Anti-Glairons Elixir.
GUILLIERMOND—Syrup Iodo-Tannique.
HEMEL—Powder for Dogs.
HOGG—Cod Liver Oil.
do Pills of Pepsine.
do do do and Iron.
do do do and Proto-Iodide of Iron.
HOMOLLE & QUEVENNE—Granules of Digitaline.
HUFELAND—Digestive Liquor.
JOY—Pectoral Fumigator, Anti-Asthmatic.
KERATOPHILE—Pomatum for Horse Hoofs.
LABARRAQUE—Disinfecting Fluid.
do Wine of Quinium.
do Pills of Quinium.
LABELONYE—Syrup of Digitale.
LAMOUROUX—Syrup of "
LAROCHE—Wine of Quinia Bark.
LARREY—Cleansing Syrup.
LARTIGUES—Anti-Gout Pills.
LAURENT—Medicated Drag6es.
LAVILLE—Anti-Gont Pills
do do Liquor.
LEBEL—Scordium Powder.
do Savonnies of Copaiba.
LECHELLE—Hemostatic Water,
do Castoreum Nervosine.
de Anti-gont.
do Anti-Dolonr, Silk,
do Cleansing Syrup of Larrey.
LECHELLE—Cubeb, Solid and Concentrated.
do Anti-Putrid Water.
do Anti-Fever Powder.
do Collyre Divin (Eye Wash).
LERAS—Liquid Phosphate of Iron.
do Drag6es of do do.
do Syrup of do.
LEROY—Vomitif.
do Purgatif.
do Pills.
MATHEY-CAYLUS—Capsules pur Copaiba,&c.
MEGE—Pur Copabine, &c.
MENE MAURICE—Acoustic Oil.
MONDINI & MARCHI—Cachou of Bologne.
MOTHES—Capsules of Copaiba.
do do of Cod Liver Oil.
MOURIES—Farina for Children.
do Chocolate do.
NAFE—See "Delangrenier."
OLIVIER—Depurative biscuit.
PAUL GAGE—Taffetas.
do Anti-glairous Elixir of Guillié.
PELLETIER—Elixir and Odontine.
PEPSINE—See "Boudault."
PERSONNE—Iodine Oil.
PETREQUIN—Pills of Proto-Iodide of Iron.
PHILIPPE—Tooth Wash
do Tooth Powder.
do do Charcoal and Quina.
do Kouseo, ordinary dose.
do do strong dose.
PIERLOT—Valerianate of Ammonia.
PRODHOMME—Essence of Sarsaparilla.
QUERU—Cod Liver Oil Jelly.
QUEVENNE—Drag6es of Iron reduced.
RACHAOUT—See "Delangrenier."
RAQUIN—Copaiba Capsules.
REGNAULT—Pectoral Paste.
ROBIQUET—Syrnp of Fyro-Phosphate of Iron.
do Drag6es of do do
DR. ROUSSEAU—Celestial Water for the Eyes.
ROYER—Cod Liver Oil.
ROGE—Citrate of Magnesia Powder.
do do Lozenges.
SAMPSO—Injection.
SEDLITZ—Powder.
SEGUIN—Wine.
SEIGNORET—Lozenges of Iodide of Potassium.
SODA—Powder.
TRANCHE LAHAUSSE—Regenerator.
VALLET—Ferruginous Pills.
VICHY—Water.
" Lozenges.
" Chocolate.
" Mineral Salts.
ZUCCANI—Benzine.

Articles always on hand.

DR. VALLEISE—Suspensories, Trusses, and patented Elastic Appliances, &c.
BREUER-PERIN—Vinaigre a la Glycérine.
do Soap Glycerine.
do Paste, do *g. modèle.*
do do do *p. modèle.*
do Perfumed Glycerine.
DR. PIERRE—Dentifrice Water.
do Vinaigre, Toilet Vinegar.
do Roses Toilet Vinegar.
HOUBIGANT-CHARDIN—Perfumery.

NOTICE.—We beg to advise our Customers, that our frequent and direct intercourse with the owners of the above Medicines, as their Agents or Consignees, allows us to assure them, that by addressing their orders to us, they will surely avoid the Spurious Articles, and at the same time, always obtain the very lowest prices.

Toilet Articles: Brushes, Shell-combs, &c.

Orders received and promptly executed for the following articles.

Medicinal Herbs.
Homœopathic preparations.
Utensils for laboratories.
Surgical instruments.
Vulcanized instruments of Galante.
Apparatus for Gaseous Water.
Philosophical instruments.
Chemical do.
Fancy labels for druggists.
Ordinary and philosophical scales.

Glass, crystal, and china vases.
Scientific books.
MAUGENET & COUDRAY Perfumery.
DEMARSON CHETELAT do.
LUBIN do.
VIOLET do.
PIVERT do.
SOCIETE HYGIENIQUE.
MONPELAS do.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.
By SAMUEL R. PERCY, M.D.,
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE II.—PART II.

CORROSIVE CHLORIDE OF MERCURY.

Poisonous Doses.—When a poisonous dose has been taken the symptoms are a disagreeable and acrid metallic taste in the mouth, which has generally a whitened appearance, with a sense of burning and constriction at the epiglottis, in the œsophagus, and in the stomach. The pain in the stomach is generally excruciating, but there have been instances where there has been no pain. A deathly feeling of nausea, with an exceedingly painful vomiting, generally follows, the vomited matter being sometimes only mucus, at other times mucus mixed with blood. There is great prostration, sometimes convulsions, and occasionally cramps in the stomach and legs. If any length of time elapses before death takes place, there is generally violent and painful bloody purging, and difficulty in passing urine. The countenance is first flushed, afterwards it has a look of inexpressible anxiety. The pulse is small, rapid, and wiry; there is burning thirst, and great restlessness, and the respiration becomes labored. The symptoms are those of gastro-enteritis, and much resemble poisoning from other corrosive substances. Professor Christison draws the following characters as distinguishing poisoning by corrosive chloride of mercury from that of arsenious acid:—1. The symptoms begin much sooner; 2. The taste is much more unequivocal and strong; 3. The acridity and irritation in the gullet are much greater; 4. The countenance is flushed, and even swollen; whereas, in poisoning by arsenic, it is usually contracted and ghastly; 5. Blood is more frequently discharged by vomiting and purging; 6. Irritation of the urinary passages is more frequent; 7. Nervous affections are more apt to come on during the first inflammatory stage; 8. The effects are more curable than those of arsenic; 9. Deviation in the symptoms is more rare. If the patient recovers from the primary effects of the poison, he is generally left with an irritable state of the bowels and urinary organs; and salivation with its usual concomitants.

Treatment of Poisoning.—The first indication is to give diluents and an antidote combined; for this purpose, water mixed with the white of eggs should be freely administered. If eggs are not convenient, wheat flour mixed with water or milk may be given, and although these substances are not as efficient antidotes as albumen they tend to neutralize the activity of the poison. Albumen mixed with the corrosive chloride of mercury in this way combines with it, so as to form a compound, which is for the time at least inert; but it should be removed either by the stomach-pump or by vomiting, as the mercurial, in an unchanged form, may be detected in the substance by chemical reagents. Mialhè has recommended the hydrated proto-sulphuret of iron as an antidote to this poison, but to be of service it must be given soon after the poison has been swallowed. He states that reactions take place between these substances, the iron being converted into a proto-chloride and the mercurial into a sulphuret. (The reactions may be thus expressed, Fe S + Hg Cl = Fe Cl + Hg S.) He has used the same substance as a gargle, and says that it will instantly remove the metallic taste of the corrosive chloride from the mouth. A mixture of two parts of iron filings and one part of granulated zinc, has been recommended by Bouchardat for reducing the mercury in the corrosive chloride to a metallic state. But these metallic substances are not always on hand, and as it does not do to delay a moment longer than necessary, let the flour and water or milk be used, until eggs can be obtained, or until the metals can be sent for. In cases of poisoning, your patient's life depends upon your knowledge and promptitude; and you should always know what class of remedies are most easily obtained, which could be administered on the spot. After the administration of the eggs, flour, or milk, either free vomiting should be induced, or the stomach-pump used, after which a dose of castor-oil should be given, and the irritation and inflammation counteracted by *free* doses of opium and other treatment, to allay gastro-enteritis.

There are instances of poisoning and death on record, from the external application of corrosive chloride of mercury.

Post-Mortem Appearances.—Supposing you have been sent for, to attend a person whom you suppose to have been poisoned by corrosive chloride of mercury, and that death takes place soon after your visit—what evidences of poisoning will you look for? These are cases in which you will be brought before a coroner's jury to give evidence; and upon the knowledge you have displayed, and the skill with which you have conducted your examination, will depend the freedom from suspicion of a person wrongfully accused, or the punishment of, or the escape of a guilty individual. With the great responsibility of a person's life resting in your hands, for the sake of your own reputation and that of the profession to which you belong, you must not be either careless or ignorant, and if you have not perfect confidence in your own ability call in some professional brother to help you; in fact, it is always better under all circumstances, if possible, to have two physicians in attendance on such cases. If a person has been poisoned by this substance and death takes place within a few hours, you must not only examine the mouth, the throat, the œsophagus, the stomach, and intestines, to ascertain what pathological changes have taken place, but you must also preserve these organs and their contents for chemical examination. You will probably find the mouth, the throat, and œsophagus abraded in places, the mucous lining whitened, and evidences of congestion and commencing inflammation. The mucous membrane of the stomach will often show marks of corrosion and inflammation, sometimes only in patches, and at times more extended. Beneath these patches, masses of extravasated blood are often found. If the amount of poison has been large and diluted, the whole mucous coat will often have a grey, or slate color, owing to partial decomposition. Marks of inflammation similar to those just described, will be found in the duodenum and small intestines if the poison has passed over them, and there are occasionally instances where they have been found in the whole tract of the intestinal canal. The mesenteric glands, kidneys, and bladder, should also be examined; and all the urine found, saved for chemical examination. It has been too much the case to neglect the examination of the kidney and urine; in the former you will, in most instances, find traces of inflammation; and in the latter I have no doubt there may be found traces of the poison; and from the violent vomiting that frequently takes place, the poison may be dislodged from the stomach, and the only portion that is to be found may be discovered in this secretion. It is important that all the urine that a patient passes after poisoning, should be saved and examined; it is more important to save this, than the latter vomited matters. The organs that I have mentioned must not be the only ones examined for pathological changes, for independent of the effects that poison may have on them, you may discover some other cause of death than that of poison.

But frequently in cases of poisoning, death does not take place for several days; you then have a different state of things, and would look for different pathological changes. Here you would not find the whitened appearance of the mouth, fauces, and œsophagus, but if there were any changes in the membrane it would be that of the redness of inflammation. The stomach would not present the greyish ap-

pearance above mentioned, but would be highly injected with red blood and inflamed, either in patches or throughout its whole extent. There may not be any marks of change in the duodenum or small intestines, but the large intestines would probably present many spots or patches of inflammation. You recollect that I have before alluded to the experiments of Headland with sulphate of magnesia; that he found that it was absorbed by the stomach into the blood, but that it was deposited again from the blood in the large intestines. The same absorption takes place here, and that it is again deposited in the large intestine seems more than probable from several cases that have been noted, wherein no change had been observed in the small intestines, but the stomach and portions of the large intestines were equally inflamed. The kidneys would be also inflamed, and being unable to eliminate much of the poison, would throw it back upon the system, to be eliminated by the large intestines, which would become inflamed by the poison, even to the anus. In these cases the symptoms of the poisoning during life, and the pathological changes found after death, would be the only evidences of the administration of poison; for chemical analysis would not detect it in the tissues after death. It is generally supposed that to convict a person of murder by poisoning, it is essential to prove the existence of the poison either in the body or its secretions; but this is not so, nor is it right that it should be so. There are certain well marked symptoms by which the physiologist is able to determine on physiological principles the existence of poisoning, when no poison can be detected by the most accurate chemical test. Palmer was convicted of murder under such circumstances.

Chemical Analysis for the Detection of Corrosive Chloride of Mercury.—On being called to a case where you have reason to suspect poisoning, it is of the first importance to save all the vomited matters, for they frequently contain all the poison there is to be found. It is also important to save all the urine passed, for as the salt is very soluble a portion amply sufficient for detection may be found in the urine.

The vomited matters, the contents of the stomach and upper intestine, the stomach itself, and the urine, may be examined separately. All but the latter may be boiled in distilled water, and the fluid filtered and evaporated. The dry mass that does not pass through the filter may be digested in ether, the ether filtered off and evaporated. Portions of these evaporated fluids may be treated with boiling distilled water, filtered, and tested by the chemical reagents hereafter to be referred to. The tests that I shall here mention are those that have been applied and recommended by Dr. T. G. Wormley, and they are the most minute and accurate of anything we have seen, even in the exact science of chemistry. I do not mean to say that they ar e new tests, only that they have been applied with such science, accuracy, and skill, that they present us more certain and minute results than we have hitherto obtained. As I shall have occasion to use the long term, corrosive chloride of mercury, many times, let me use the symbol HgCl. I before explained to you that the salt was composed of one equivalent of mercury Hg, and one of chlorine Cl. The symbol HgCl is short and easily remembered. Small quantities of the solution of HgCl may be applied by a pipette, in a watch glass or upon a glass slide, and with another pipette, a small quantity of the reagent may be added. 1. *Ammonia.*—Added to a solution of Hg Cl gives a dirty white flocculent precipitate, insoluble in an excess of ammonia. If the HgCl solution be exposed to the vapor of ammonia, it gives the same by reaction. By this test $\frac{1}{100}$ gr. is easily detected, and with $\frac{1}{3000}$ gr. the reaction is to be satisfactorily seen. 2. *Potash.*—Liquor potassæ added to a solution of HgCl, gives an immediate bright yellow amorphous precipitate, insoluble in an excess of the reagent. By this reagent $\frac{1}{100}$ gr. can be readily detected. 3. *Carbonate of Potash.*—If a small quantity of this reagent be added to a solution of HgCl it gives a yellowish or reddish yellow precipitate; but if an excess of the reagent is used, the precipitate is of a brick-red color. By this reagent $\frac{1}{1000}$ gr. can be readily detected. 4. *Chromate of Potash.*—This reagent produces a greenish-yellow flocculent precipitate, easily distinguishable in $\frac{1}{100}$ gr.; but bichromate of potash gives no precipitate with this quantity. 5. *Iodide of Potassium.*—This reagent produces an immediate bright scarlet precipitate, which is readily soluble in an excess of either HgCl, or the reagent; and may be distinguished to $\frac{1}{3000}$ gr. The least visible quantity of HgCl in a dry state touched by a solution of KI (Iod. Pot.) becomes immediately yellow changing quickly to scarlet, soluble in an excess. 6. *Ferro-Cyanide of Potassium.*—This reagent produces a copious, dirty white amorphous precipitate, soluble in an excess of the reagent; this precipitate is visible in $\frac{1}{10000}$ gr. 7. *Ferri-Cyanide of Potassium.*—This reagent produces a greenish-yellow amorphous precipitate, insoluble in an excess, and may be distinguished even to $\frac{1}{3000}$ gr. 8. *Chloride of Tin.*—This reagent produces a light grey thin precipitate, which is flocculent, and may be distinguished even to $\frac{1}{30000}$ gr. 9. *Nitrate of Silver.*—This precipitate produces a copious white curdy precipitate of chloride of silver, which is distinguishable to $\frac{1}{100000}$ gr., and in Gmellin's Handbook it is stated that a solution of sal-ammoniac, containing one part of chlorine in 3,200,000 parts of water gave with nitrate of silver a "barely perceptible cloud." 10. *Hydrosulphuric Acid.*—The solution of HgCl must be slightly acidified with hydrochloric acid, and a stream of washed sulphuretted hydrogen passed into it. When the solution holds $\frac{1}{100}$ part of its weight of Hg Cl, it gives an immediate brown precipitate, which soon changes to a dark brown, and ultimately to a copious black precipitate. If the solution contains $\frac{1}{10000}$ part of HgCl it is precipitated in brown flakes, which become darker. 11. *Copper Test.*—This test is so minute and its details so long, that I can give you but a mere outline. You will soon have an opportunity of reading and studying a work from Dr. Wormley, on the "Micro-chemistry of Poisons," which will give you more accurate tests than any I have given you here. This test consists in introducing into the HgCl solution a small clean slip of copper foil, which will cause a decomposition of the mercury compound with a deposition of metallic mercury upon the copper. The delicacy of the test is much improved by acidulating the mercury solution with hydrochloric acid, and also by treating the acidulated solution. To perform this test a small quantity of the mercury solution may be placed in a watch glass, and acidified with hydrochloric acid, and a small slip of copper introduced into the solution, and heated over a spirit lamp. $\frac{1}{100}$ grain of HgCl will impart to the copper an immediate silvery lustre, which soon becomes grey; this reaction takes place equally well without the hydrochloric acid or heat. The copper should not be less than about $\frac{1}{2} \times \frac{1}{3}$ inch, otherwise some of the mercury will become detached. After allowing the copper to remain in the solution for several minutes, it is to be removed, and carefully washed with a small stream of water from a wash bottle, or with water containing a little ammonia; it is then gently pressed between folds of filtering paper until perfectly dry. It is now placed in a perfectly clean and dry reduction tube; heat being applied to the closed end the mercury will volatilize and condense a little above the point heated, in the form of a mist-like deposit, very readily discernible by the naked eye. If the sublimate be examined by the low power of a microscope, it will be seen to consist of innumerable spherical globules, which are opaque by transmitted light, and present a very bright silver lustre under incident light. The tube should only be heated in the part that contains the copper; every time the mercury is volatilized it is attended with more or less loss. $\frac{1}{1000000}$th part of a grain of HgCl may be satisfactorily shown by this test. 12. A very small quantity of HgCl when mixed with a small quantity of calcined carbonate of soda, and treated in a small reduction tube, will give a sublimate of mercurial globules.

It has been asserted by some that the finding of HgCl

in the system is no proof of its having been administered as a poison, for calomel may become converted by the action of chlorides, or common salt, into HgCl. Instances are said to be adduced in proof of this theory, but I think there are as yet no evidences that would be accepted as *proof* by a prudent toxicologist. It is a fiue-spun theory that may be serviceable to an able lawyer to puzzle a physician and befog a jury. If such were the case we should meet with numerous cases of poisoning, for calomel is very frequently administered, and by some of our southwestern brethren in doses of a teaspoonful. But we never hear of poisoning in these cases. There are no doubt many instances where HgCl is to be detected in calomel in small quantities, when it has been prepared by careless manufacturers, but I have never seen it in sufficient quantity to produce poisoning of even a mild degree. As to the theory of calomel changing to HgCl in the stomach, you need attach no importance to it. I think the action of calomel may be explained in some other way, though I suppose you are aware that there are some persons who assert that it produces no effects upon the system unless it is changed by the alkaline chlorides in the stomach and intestines into the corrosive chloride; this theory I discussed at some length in my lecture on calomel.

Original Communications.

THE MECHANISM AND TREATMENT OF LABORS WITH FACE PRESENTATIONS,

BEING IN PART A PAPER READ BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By JOSEPH MARTIN, M.D.

OF NEW YORK.

(*Continued from page* 22.)

I WILL now endeavor to show that lateral uterine obliquity, at the beginning of labor, is the cause of face presentations—that the head does not enter the pelvis by the mento-frontal diameter—that the chin is not at any time fully extended—that the occiput passes over the perineum before the chin merges from under the pubic arch—that the mechanism of such labors depends upon some well known principles of mechanics—and that a presentation of the face can be converted into a vertex presentation.

We will now direct attention to some of the principles of mechanics that perform an important part in the mechanism of labors with face presentations. The base of the cranium, when it is about to enter the superior strait, and during the process of labor, may well be considered a lever, the length of which is represented by the mento-occipital diameter. The long arm is the space between the point of the chin and the condyles at the great foramen, and the short arm is the space between the condyles and the occipital protuberance. When the joint, formed by the condyles and atlas, is stationary, or nearly so, it becomes the fulcrum of the lever when power is applied to the chin, and the cranial base is then acted upon as a lever of the first kind. And as the long, or mental arm, is one inch longer than the occipital arm, it requires but little force to depress the chin, when the head is left free to move upon its transverse axis. To depress the occiput, after it is elevated, requires rather more force, but if it be drawn down one or two inches, the chin will be raised one and a half, or three inches.

Now, when the base of the fœtal cranium, that is, the mento-occipital diameter, is parallel with the plane of the pelvic brim, at the beginning of a labor, *the manner in which the head enters the superior strait will depend upon the position of the uterus.* If it be nearly vertical, its contractile power, acting in the direction of the longitudinal axis, forces the occipital portion of the head, or the short arm of the lever, first into the cavity of the pelvis, because if the axis be then extended it would pass through that part of the cranium. This is the mechanical process in natural labors.

When, however, the fœtal head, at the beginning of a labor, is at the superior strait, and the uterus is inclined to the right or left of the patient, on the same side with the fœtal occiput, the uterine contractions produce a very different result. For if the longitudinal axis of the uterus be then extended through the cranium, it would terminate at the bregma; consequently the occiput could not be forced into the pelvis, but the forehead would be pressed against and below the brim at the opposite acetabulum. And, as the oblique position of the uterus, at the beginning of such a labor, would cause some separation of the chin from the chest, the circular uterine fibres, acting upon the long arm of the cranial lever at the chin, would force it into the pelvis, on one side, while the occiput would rise above the brim on the other side; the head rolling upon its transverse axis at the condyles, as a fulcrum, until the forehead and other parts of the face present. If the long axis of the uterus be then extended, it will be found to terminate at the upper lip, and the uterine contractions would force the face further down into the cavity of the pelvis.

Almost every writer on midwifery who makes any mention of *the origin of face presentations*, states, as shown above, that obliquity of the uterus at the beginning of labor is considered the cause. And Baudelocque advances the opinion, founded upon experience and observation, that—"There can be no face presentation without an obliquity of the uterus on the same side with the occiput." In every case the writer has seen there has been more or less lateral obliquity of the uterus, on the same side with the occiput, in one of the occipito-posterior positions; and in every instance the placenta was attached to the fundus uteri.

Before giving in detail a description of what I consider *the true mechanism of such labors*, it will be well to decide the question—is the chin, in such labors, fully extended as represented in the text-books? Smellie invariably drew down the chin when he was about to use his forceps in labors with face presentations, either with his fingers, or with a metallic hook, having a round button upon the end of it, which he contrived for the purpose. Since his time it has been the practice of accoucheurs generally to draw down the chin when it is at the pubic arch, from the prevailing belief that it aids delivery. Tyler Smith recommends such an interference, and Dr. Meigs of Philadelphia lays it down as a rule of practice. It must not, therefore, be considered strange that writers on midwifery should believe that a full extension of the chin ought always to attend face presentatious. This opinion is so prevalent, and the interference so general, that very few obstetric practitioners have had an opportunity of observing what the natural position of the chin is at the termination of such labors. I have, indeed, met with but one writer who has given the exact position of the chin in the last stage of the process. Doctor Spaith, in an essay entitled, "Experience in Face Presentations," published in a German periodical, and favorably noticed in the British and Foreign Medico-Chirurgical Review, for April, 1860, describes the termination of a number of such labors in the following language—"At the outset, the upper lip was fixed against the symphysis; the occiput then rolled over the perineum, *when at last* the mouth and chin merged from under the symphysis."

I have seen two labors in which I had the opportunity of observing this fact. In the first, there was a decided right obliquity of the uterus, a position it which it had been for several weeks. The placenta was attached to the fundus uteri, and the occiput was in relation with the right sacro-iliac synchondrosis, and could be felt above the brim. The parts presenting at first were the left malar bone, the left part of the brow, and the bridge of the nose. As the pains increased in strength, the whole face could be traced, the chin being at the left foramen ovale, and the forehead

at the spine of the right ischium. The chin and lips then passed under the symphysis pubis, and remained there until after the occiput had glided over the perineum. The chin was not at any time fully extended, as I ascertained by frequent examinations, its anterior surface and the lips, and not the tracheal portion of the neck, being the central point around which the occiput moved in the arc of a circle as it was forced through the outlet.

The second case is so well calculated to illustrate the true mechanism of labors with face presentations, that I shall describe it in detail; and will also give, what I consider the proper treatment of such labors as I proceed, because the practice is plainly indicated by the mechanism. On the 24th of January last, I was called to see Mrs. B., in labor with her second child. She had experienced labor pains for some hours. A slight right obliquity of the uterus was noticed, which she assured me had existed for two weeks, and which seemed to be no more than what is observed on first presentations. I found upon examination per vaginam, the head at the superior strait, the os uteri relaxed, and open to the size of half a dollar. As nothing but a smooth hard part of the head presented through the membranes, I left the bed-side, to wait for a further advance of the labor, without ascertaining the exact position of the uterus. The labor pains now became severe and frequent; and, at the end of three quarters of an hour, the membranes were suddenly ruptured, with an audible sound, and the liquor amnii was dashed forcibly against the foot-board of the bedstead. I examined her immediately, and found that the face had entered the pelvis. The presenting parts were the left malar bone, the eye, and the upper part of the nose. I now had no doubt that the part first touched was the left side of the forehead. I then made an external examination, and found that the longitudinal axis of the uterus formed an angle with the median line of the abdomen of about 40° to the right; and that, if the axis were then extended through the head, it would terminate near the left malar bone. The placenta was attached to the fundus uteri, and the occiput could be distinctly felt above the brim, in relation with the right sacro-iliac synchondrosis.

It cannot be said that in this case the head entered the superior strait with the face turned downwards, that is, by the mento-frontal diameter. On the contrary, the relative positions of the body and head of the fœtus showed that the face, at the beginning of the labor, was turned towards the left side of the pelvis, and that the crown was turned downwards. The chin, being somewhat extended, was acted upon by the circular uterine fibres, and forced below the brim, at the left acetabulum, while the base of the cranium turned upon the condyles at the foramen as a fulcrum, and the occiput rolled upwards at the right sacro-iliac synchondrosis. This was evident from the order in which the different parts of the face successively presented, as the head was forced into the pelvis by the uterine contractions. That is, first, the smooth, hard part of the head, felt at the beginning, which must have been the brow; next the malar bone; then followed in succession, the cheeks, the nose, the lips, and the chin. It was in this manner that the fœtal head entered the pelvis, by the super-occipito-frontal and the mento-bregmatic diameters.

This mechanism plainly indicates the mode of treatment that ought to be employed to correct the malpositions of the head in face presentations; that is, it shows that the chin and vertex ought to be restored to their normal positions, by bringing down the occiput with the hand, the vectis, or one blade of the forceps. The uterus would then assume its central position, and the labor would terminate with a vertex presentation. In making this change, the chin is raised out of the pelvic cavity by the mento-bregmatic diameter; the forehead is then raised above the brim by the super-occipito-frontal diameter, and the occiput brought below the brim by the occipito-bregmatic diameter. So that the long diameter of the head does not interfere in changing the face to vertex presentation. But in this case, as the os uteri was fully open, all the soft parts relaxed, the fœtal head comparatively small, and the labor progressive, I concluded not to interfere, but to carefully observe the mechanism of the labor.

The forehead now pressed against the spine of the right ischium, and the chin upon the soft parts at the left foramen ovale. A few severe labor-pains soon caused the head to rotate, and forced the chin forwards and downwards until it passed under the pubic arch; while the occiput sank below the brim at the right sacro-iliac synchondrosis, and glided under the promontory of the sacrum. The face was now just within the vulvæ, and the mento-frontal diameter was nearly parallel with the antero-posterior diameter of the outlet. During this process of rotation and descent, no artificial means to hasten delivery ought to be resorted to, except in extreme cases, because the chin, after turning under the ramus of the pubes, cannot be elevated above the brim by acting above the occiput; and the forceps cannot be applied without placing one blade upon some part of the face, when traction would do more or less injury.

The whole power of the uterus was now directed upon the condyles at the great foramen, and forced the occipital arm of the cranial lever outwards, while the chin and lips became stationary, as a fulcrum, under the pubic arch, until the occiput rolled over the perineum; the base of the cranium having been acted upon as a lever of the third kind; so that the head passed through the outlet by the mento-frontal, the mento-bregmatic, and the mento-occipital diameters; and not by the pretrachelo-frontal, the pretrachelo-bregmatic, and the pretrachelo-occipital diameters, as stated by Cazeaux. The shoulders entered the pelvis by the left oblique diameter; the left passed under the arch, and the right over the perineum, while the face turned towards the mother's left thigh. Mother and child did well.

The treatment during this last stage ought to be non-interference, unless the head be large and the pelvis small, when the blades of the forceps can be easily passed over the ears, as in vertex cases. Traction, however, must not be made in the same manner; but in the direction of the long axis of the uterus, so as to aid nature in the expulsion of the occiput.

I have met with but one labor with a face presentation, in addition to those already published, in which the vertex was brought down by artificial means. In June, 1860, I attended Mrs. M. residing in 36th street, New York, in labor with her third child. The membranes had been ruptured five hours before I saw her. The face presented, with the chin, at the right foramen ovale, and the forehead at the spine of the left ischium. The os uteri was well opened and relaxed. The right malar bone and cheek, the superciliary ridge, the nose, lips, and chin, could be easily distinguished. On examination externally, I found a decided left obliquity of the uterus, with the placenta attached to the fundus uteri, and the occiput above the brim of the left sacro-iliac synchondrosis. The patient told me that "the womb had been in that position for some days." I passed up the right hand along the left side of the head to the occiput, bent the fingers over it, and drew down the vertex, while pressing the uterus with the other hand towards the median line of the abdomen. I then turned the occiput forwards to the left foramen ovale, waited for strong labor pains, and withdrew the hand. The uterus now assumed its central position, the vertex presented, with the head in the left occipito-anterior position, and in little more than one hour the woman was delivered of a male child that weighed eleven and a half pounds. Mother and child did well.

Now, admitting that the above views and suggestions are based upon correct principles, let us consider for a moment, what would be the probable results if they were practically adopted in some Lying-in Hospital. For illustration, I will refer to a paper, published in 1859, by Professor Vonhelly, chief physician to the Lying-in Hospital at Prague. He states, that during his superintendence of

that charity, there occurred fifty-eight labors with face presentations, in thirteen of which the children were born dead; making upwards of eighteen per cent. One was putrid, and the remaining twelve were still-born; the process of parturition in all the cases having been left to nature. Yet this learned and experienced accoucheur adopts the prevailing opinion, and repudiates all attempts to change a face to a vertex presentation. But, with deference, I contend that if the malpositions of the fœtal heads, in the cases he has reported, had been corrected in the manner proposed above, each of those twelve children would have had all the chances for life that a normal vertex presentation can offer.

I will now briefly notice that description of labor, with presentation of the face, which terminates with *the chin passing over the perineum*. Velpeau supposes such a variety of face presentation possible. But Cazeaux denies that it can take place; because, he says, the long diameters of the head would interpose. Dr. Murphy, and some other writers on midwifery, have adopted this opinion. Tyler Smith believes that, under ordinary circumstances, such a mode of termination is impossible without instruments. But Smellie, in his second volume of the edition mentioned above, describes three labors, with face presentations, that terminated with the chin over the perineum. In two of them he delivered with his forceps, and saved one of the infants. And at page 279, he records the only case of a successful natural delivery in such a labor, that I have seen. He says: "I plainly distingnished the face and the chin backwards at the coccyx. In two pains more the face and the forehead protruded the posterior parts in form of a large tumor, the perineum and fundament were greatly lengthened; the vertex and occiput slipped out from below the pubes, and the forehead and face turned up from the perineum."

I have not seen a labor of this description. But in February, 1859, a case occurred in my practice that will illustrate the manner in which such face presentations originate, and will show that they may be converted into vertex presentations by external manipulation. A lady, in labor with her fifth child, had severe pains for seven hours. The head was at the superior strait, the os uteri was well open and relaxed, and an irregular surface presented through the membranes. An external examination disclosed a decided right obliquity of the uterus, which had been stationary for six weeks, with a large placenta attached to the fundus. The occiput could be felt high above the brim, at the left acetabulum; the face being turned downwards, and presenting at the superior strait. The labor-pains being severe, I slowly forced the occiput downwards with one hand, while pressing the uterus towards the median line of the abdomen with the other, until the head entered the pelvis, in the left occipito-anterior position, when the labor soon terminated with a vertex presentation.

The history of this case shows that the mechanism of labors, with this description of face presentation, is the same as that in which the chin passes under the pubic arch, the termini of the cranial diameters being simply reversed. And from the success of the external manipulation, we may safely infer, that a presentation of the face, which would terminate with the chin under the pubes, may be prevented by a similar treatment, when the brow presents, and the occiput can be felt above the brim, on the same side, with an oblique pelvis.

THE LATE SIR JOHN FORBES.—The will of this distinguished member of the profession has just been proved, and the personalty sworn under £5000, which he has left to his only son. To the Medical Benevolent Fund and the Royal Medical Benevolent College he has left legacies of £100 each.—*Lancet.*

THE *Brit. Med. Jour.* ridicules the story recently in circulation that forty-three children were inoculated with syphilis through the medium of vaccine lymph.

THE PRESENT

STATUS OF PSYCHOLOGICAL MEDICINE.

By I. PARIGOT, M.D.,

LATE COMMISSIONER OF LUNACY FOR THE COLONY OF GHEEL, BELGIUM, ETC.

I.—INTRODUCTORY REMARKS.

THE motto inscribed on the banner of the medical profession, might well consist of one word only—PRODESSE; for, devotion to those who suffer as well bodily as mentally, sacrifice accompanied by real self-denial, is, and will be, the characteristic distinguishing the medical from all other professions. There is no other profession in which the lives of its members are constantly in danger; in the dissecting room, in hospitals, in infected garrets or hovels, and finally, on the battle-field medical men meet death, and as it were at every step. Still, they are ever found ready to accomplish their duty whatever their destiny.

It might properly be asked of every pioneer in the field of public beneficence, in the language addressed by the primitive inhabitants of this island to every stranger—*Who art thou? Which God dost thou adore? What are thy weapons?* Changing only the terms, the writer would say that, in community of spirit, feeling, and duty with his American brethren, he has always worked and striven, to the best of his abilities, for the benefit of sufferers, especially those who labor under mental afflictions; that truth having always been the object of his search, he is ready to accept it from others; and finally, that his desire of promoting science never interferes with his respect for personal character and convictions.

It is intended in this and subsequent articles, to ascertain the actual state of medico-psychological science, viewed, perhaps, from a different point than is usually taken, and considered in reference to what might accelerate its progress in this and other States of the Union.

To accomplish this object, it will be necessary to inquire into public opinions on insanity, to learn whether, as in Europe, there exist prejudices against insane persons, and even against their physicians. A very important point also to be examined, in its relation to the advance of psychiatry, is the moral position or conditions in which medical officers of public and private asylums, and even general practitioners, are placed by circumstances. Although they may have ready means of study, can they, in proportion to these facilities, promote that special branch of medicine? The solution of this question depends, in a certain degree, upon the acknowledged necessity of the public teaching of psychiatry in *every medical school or college*, with practical *cliniques*, in every public asylum; or for large towns, in special and small establishments in which recent cases should be received gratuitously for that purpose. This, or any better analogous regulation would, in a few years, give such pre-eminence to American psychiatry, that two great results would be obtained by it; *first*, a considerable benefit in the per-centage of cures, and at the same time a diminution of insanity in the middle and superior classes; and, *secondly*, a great example given to other countries where, in spite of many advantages of all kinds, this branch of knowledge is neglected in the very face of the daily increase of insanity. Concerning hospitals, public asylums, and the so-called *Free-air Asylums* (which might hereafter be instituted), their regulations will be the object of our attention, regarding especially *one point*, their *therapeutical organization*, which, in fact, is the fundamental object of all such institutions; there is a great law which, owing to the ignorance of administrative power, has never been properly appreciated, viz. that the proportion of the medical staff to the number of patients, ought to be such, that the latter should be really under medical treatment. This object is not thus obtained generally; we deny involuntarily, the right and facilities of being cured, whilst, at the same time, the burden of public charity is unnecessarily increased. It should be inquired, also, how medical ledgers could be kept so as to obtain accurate, scientific records in which diagnosis, treatment, etc., may be properly studied. We have been struck by this neglect in Euro-

pean establishments, and think, that no medical staff of any hospital should ever shrink before the consequences of a *contre-enpertise* made by any physician whatever be the school to which he may pertain. If our public institutions are open to the public; if our clinics are free; why should we not have the same moral control over the opinions entertained in an asylum by any physician on difficult cases under his treatment? All such regulations, and others of perhaps minor importance, are too much under the direct or indirect influence of administrative power, such as governments, corporations, boards of visitors, trustees, governors. The responsibility should be entirely with the medical staff. It might then be seen, that the regulations would minister to the wants of the insane. But in the contrary case, they often have proved to be the means of forming a collective power, exercised by petty rulers, each of whom acts without real responsibility. It will be well, also, to inquire how far the concentration of hundreds upon hundreds of patients in one immense building, serves the great purpose of curing the greatest possible number. In some of these badly regulated institutions in Europe, we found a sort of administrative mechanism, in which nobody could take a real interest from a tyrannical power that governed each officer, and in which, consequently, the physicians were not much above the smallest officer, even a porter! It is very probable, and I hope certain, that such abuses do not exist in free America, where inquiries may be conducted with perfect liberty, and the results be made public. Some institutions may, however, have been made in imitation of those abroad, and something, in that respect, might be wanted in regard to liberal principles. Next occurs the question as to the necessity of establishing commissions in lunacy in every State of the Union. They may be regarded as the balancing power between administrative authority of public or private asylums, and the guardian of the laws that protect the insane. Such commissions, invested with legal authority for the benefit of all parties, have everywhere exercised that power of investigation and redress in such a manner that authorities and physicians have been encouraged to the entire fulfilment of their respective functions, and even found the necessary protection in special cases. One of our subjects will be, also, the necessary legal and scientific guarantee, that justice is done in the application of the law where, in consequence of judicial and medical power, free citizens are deprived of their liberty in public or private asylums; too much attention cannot be given to such acts, as regards all the parties engaged, and especially physicians. They are of great importance, and public and authentic records could, at any period, show that they were grounded on justice and science. Finally, we intend to study the laws of this and other States of the Union in their civil and criminal application to lunatics, in order to see how far they secure the good administration of justice, regarding the rights, fortunes, and even lives of those who are of unsound mind or who feign insanity.

We have thus briefly reviewed the range of our future inquiries. We shall have recourse to documents, and would gladly receive personal information and advice from those interested in these studies. If we fail to convince our readers of the necessity of reforming abuses or negligences, if we fail to show the necessity of employing new means of treatment for the insane, it will not be from want of conviction of the great misery, destitution, and neglect, that thousands of insane suffer either in their own families or in public institutions. I do not except the best, because there is nothing perfect; we have often been pained to witness those evils, first, in the very large asylum in which I acted many years as chief physician; then in those over which I had the right of inspection; and at last in other public and private institutions which I have visited in foreign countries; prejudices, worn-out customs, intricacy of regulations and administrative inertia, are everywhere the greatest impediment to reform. Still, true reforms must come, and all who have witnessed the miseries of the insane, have the duty imposed upon their conscience, never to abandon the cause of these unfortunates, whoever they may be, whatever be their color, and however distant they may be from us.

EXCISION OF

THE OS CALCIS AND CUBOID BONES

WITH A SMALL PORTION OF THE ASTRAGALUS.

By J. TAYLOR BRADFORD, M.D.

BRIGADE SURGEON U. S. A., AUGUSTA, KY.

It is a fact, so far as I can learn, that the operation detailed in this paper is the only instance on record, where the *os calcis* and *cuboid bones* have been successfully removed. And whilst a sincere conviction of its possibility and propriety influenced me from the moment of my first examination of the case, a counterpoise was to be found in a want of precedent, or authority, which might shield me from implied censure in the event of a failure. My examination of standard works gave me no light; not a single surgical authority that I consulted had advised the operation.

The following passage from Professor Fergusson may be taken as an epitome of what is held by leading surgeons in reference to this class of operations: "Such operations are, under any circumstances, extremely difficult, and in most instances more dangerous to the patient than amputation at the ankle or in the leg." In reflecting upon the anatomical connexion of the bones involved, it does not seem surprising that the operation has not been advised. With these important connexions, and the place these bones occupy in making up the body of the foot, it may well have been an important question, of what utility the foot could be after their removal?

It seemed strange then, as now, that under the circumstances I should have been nerved to perform such an operation, thus saving a limb, and rendering it permanently useful, while the whole surgical world recommended *amputation*. Few have a higher regard for the legitimate principles of surgery, or are more willing to yield to superiors than myself; yet there may be convictions and a concurrence of circumstances, which now and then justify the end, and the mind yields to that irresistible persuasion, whether inherent, casual, or educational. Such were the circumstances in this case.

Case.—The subject of the present operation was the son of Philip Morris, æt. 15, living five miles from Brookville, Bracken co., Ky. Constitution good, with the exception of a slight scrofulous diathesis. Ten days previous to his attack, he was rendering some help about the farm, by which he was caused to stand for some time with his bare feet in cold spring water, there exerting himself until his body become very much heated. In a few days after, acute pain commenced in the right heel, extending upwards and about the ankle; swelling, redness, and acute inflammation set in. Twelve days after the pain Dr. Corlis opened the swelling an inch below the external *malleolus*. At the end of seven weeks, I saw the boy; the heel and ankle were much swollen with a purplish cast of skin, and no less than three *sinuses* formed on the outer and posterior part of the foot. A probe was readily pushed into the cavity of the *os calcis* and up as far as the *cuboid* bone. The evidence of disease seemed to be conclusive as to the os calcis. After a consultation with Dr. Corlis, I communicated my apprehension as to the extent of disease, expressing a reasonable hope and desire to save the limb, even in the event of the cuboid being diseased. Told Mr. Morris with the use of the chloroform there would be but slight, if any suffering, and if the operation did not succeed, his foot could be amputated afterwards. On the one part it gave him a chance for his limb, on the other none. Mr. Morris was manly and prompt in submitting the case to our judgment, and on the 5th of August, 1857, Drs. Corlis, Hobday, and Robinson, assisting, I commenced the opera-

tion after the manner of Dr. Carnochan for the excision of the os calcis.

Operation.—I may describe the first part of the operation in his own language. "An incision was made on the outer margin of the tendo-Achillis, commencing about an inch above the external malleolus, and extending downwards to the lower and outer part of the heel, to a point half an inch above the plantar border of the foot. From the termination of this incision another was made to extend along the outer aspect of the foot to within an inch of the posterior extremity of the fifth metatarsal bone. From the upper part of the first incision another was made directly across the lower part of the leg, terminating a little within the inner margin of the tendo-Achillis, at its upper part, the two flaps thus formed were reflected, the outer from the external aspect of the os calcis, the inner from its internal surface, carefully protecting the posterior tibial artery and nerve as well as the adjoiuing tendons." The tendo-Achillis was then divided, one fourth of an inch from its insertion, the external lateral ligaments cut asunder, and the joint between the astragalus and os calcis entered from behind. The os calcis was so completely disorganized, as to admit of but little leverage towards its separation from the astragalus and cuboid. The operation was thus far both tedious and difficult, it being with much difficulty that the inter-osseous ligament and the calcaneo-cuboid connexions were broken up. The greater part of the os calcis was removed in fragments; upon its completion, difficult and tedious as it was, it was found that the cuboid was involved.

The incision upon the outer surface of the foot was extended up a little above the connexion of the fifth metatarsal bone with the cuboid. Portions of the cuboid which were disorganized were removed, fragment by fragment, and finally the remaining third of it in a body. Sponging and a careful examination of the surrounding bones, showed the commencement of the disease in the astragalus upon the outer and under surface where it joined and lay upon the os calcis. This fortunately was but slight, and was clipped off with the bone nippers, and the suspicious part dusted with pulverized caustic.

At this stage of the operation the wound looked frightful. The foot hung, loose, lank, and wreck-like, as though it had passed through a threshing machine. The edges of the wound were brought together, and secured by the interrupted suture, strips of adhesive plaster were passed entirely around the ankle and foot, leaving an opening at the lower portion of the wound. Before closing the wound the extensive raw surface was sparingly sponged with a mixture of turpentine and brown sugar, and at each successive dressing those portions which seemed most inclined to slough, were dressed with an application of turpentine and brown sugar (equal parts in weight).

Some time in the month of December he was able to bear considerable weight on his foot. The succeeding spring and summer, the boy walked two miles to school, and now by the use of a padded shoe on the inside, he works regularly upon the farm; and as he moves from you, it is not easy to observe the slight catch or halt in his gait. The first time I saw the boy after his recovery, he was engaged in ploughing.

Augusta, Ky., Jan., 1862.

Health of Providence, R. I.—The population of this city, in 1860, was 50,666; of this number, 4,912 were whites, and 1,537 were colored; 23,894 were males, and 26,772 were females. The deaths in 1861 were, to total population, 1 in 48·2; to white, 1 in 49·7; to colored, 1 in 24·4; to male, 1 in 47·1; to female, 1 in 49·2. There was no death by small-pox.

A new edition of Prof. Gross's System of Surgery is announced—enlarged and improved. It augurs well for the progress of American Surgery, that the first edition of this Cyclopædia has been so soon exhausted.

Reports of Hospitals.

NEW YORK HOSPITAL.

THREE CASES OF FRACTURE OF THE SCAPULA.

[Reported by James L. Little, M.D., Resident Surgeon.]

Fractures of the body of the scapula are of very rare occurrence, a circumstance explained by its deep and covered position and its great mobility. Hamilton states, that among 2358 fractures reported from Hotel Dieu, during a period of twelve years, only four examples of fracture of the scapula are recorded; and out of 1901 fractures occurring at Middlesex Hospital only eight were fractures of the body of the scapula. Hamilton himself has seen but two examples, and in view of its extreme rarity it is interesting to report the three following cases, all of which were under treatment in this Hospital at the same time. This accident is always produced by direct violence, operating with great force, as the history of the following cases will illustrate:—

Case 1.—William Hood, æt. 38, Scotland, laborer. Admitted November 20, 1861. (Dr. Jno. Watson, attending surgeon.) Patient fell down the hold on board the steamer Star of the West, a distance of 16 feet, striking upon the back of the shoulder of the left side. On examination, there is found a fracture across the body of the scapula. Patient cannot raise his hand to his head. Crepitus distinct

Case 2.—Michael Lyons, æt. 25, Ireland, laborer. Admitted December 4, 1861. (Dr. Geo. A. Peters.) Patient states that he was run-over by a cart loaded with coal, the wheel passing over the posterior surface of his shoulder; the probability is, that the wheel struck his shoulder while lying on his face. On examination there is considerable swelling over right scapula, with tenderness on pressure. No crepitus. Patient is unable to raise his hand to his head. Seven days after the injury, the swelling having subsided, patient was again examined. By placing one hand over the scapula, and with the other moving the patient's arm backwards and forwards, distinct crepitus could be felt, and further examination revealed a fracture of the scapula, the fracture running diagonally across the body of the bone.

Case 3.—Tim. Flanegan, æt. 32, Ireland, painter. Admitted Dec. 9, 1861 (Dr. Peters), having a short time previous been jammed between the paddle-wheel and the boat. On examination, patient is unable to raise his hand to his head, and is also unable to lift his elbow from his body more than eight inches. There is also an abrasion situated a little below the spine of the scapula of left side. On resting the hand over the bone and moving patient's arm, crepitus could be felt under the hand. After swelling had subsided, the scapula could be seized at its lower angle and the fragments could be moved upon each other. The direction of the fracture was from below, upwards and inwards, across the body of the scapula.

In all these cases the treatment was, simply to place the arm of the injured side in a sling. No appreciable deformity resulted in either case.

Benjamin Lee, M.D., has assumed the editorial management of the *American Medical Monthly* during the absence of Dr. Douglas at the seat of war. Drs. Thomas, Bumstead, Jacobi, Elsberg, and Parigot, are collaborators.

David Wooster, M.D., editor of the *Pacific Medical Journal*, Sacramento, Cal., has entered the army, and James Blake, M.D., of Sacramento, has become the editor of that journal.

Albany (N. Y.) Medical College held its annual commencement Dec. 28th. The valedictory address was given by Dr. James McNaughton. The number of graduates was eighteen.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, November 20, 1861.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. FORDYCE BARKER'S PAPER ON THE USE OF ANÆSTHETICS IN MIDWIFERY.*

DR. PEASLEE considered the use of anæsthetics in obstetrics as a question of the utmost practical importance, and thought that, so far as the use of chloroform is concerned, Dr. Barker's paper had exhausted the subject. Dr. P. was not, however, prepared unqualifiedly to endorse all the propositions appended to the paper. The second clause of the first proposition, viz. that chloroform is the preferable anæsthetic in obstetrics, must, he thought, be further considered. For, first, it did not follow logically from any data presented in the paper, inasmuch as the writer had not before compared chloroform, in respect to its safety, with any other anæsthetic agent in obstetric practice; and secondly, Dr. P. believed that when the comparative effects of sulphuric ether and chloroform are statistically determined, it will be found that the former is quite as safe as the latter. There may be other reasons why chloroform is preferable to ether on the whole, but no facts have yet come to light, so far as Dr. P. was aware, which rationally suggest the conclusion that chloroform is a *safer* agent than sulphuric ether, under any circumstances. Dr. Barker had, however, well stated that the effects of chloroform are quite different, so far as its dangers are concerned, when used in obstetric practice, from those produced in surgical operations; and had assigned the reasons. We are then to-night to confine the discussion to the effects of anæsthetics in obstetrics; and after this subject is disposed of, Dr. P. hoped the subject of anæsthetics in surgical practice would be discussed by the Academy as an entirely distinct one.

Dr. Barker had objected to the statement of the Committee of the Boston Society for Med. Improvement, that all anæsthetics are *depressing* agents, and had adduced a case to show that sometimes, at least, chloroform is not so. It had occurred to Dr. P. on reading that very able report that the expression "*sedative* agents" would have been a more accurate one. An anæsthetic effect is a sedative effect, but not necessarily a depressing one.

In regard to the increased danger of rupture of the perineum from the use of chloroform or of ether, Dr. P. would record his disbelief of any such increase. In the first place, he had never seen any statistics in proof of it; and secondly, the theory on which it was inferred *à priori* that such would be the case, is itself untenable merely as a theory. It is alleged, to account for the supposed greater frequency of perineal rupture in anæsthesia, that the female, being insensible, and not expressing pain by her cries, and therefore not opening the glottis during the powerful contraction of the abdominal muscles in the expulsive stage, to diminish their power, but on the contrary, thus allowing their full force to be expended upon the resisting perineum, causes the latter to give way before it is sufficiently distended to allow the fœtal head to pass. Rupture of the perineum, therefore, occurs because distension, and the expulsive force of the abdominal muscles, are not properly correlated; the latter being relatively in a *plus* degree. It follows then that if the distension be also increased in an equal ratio with the expulsive force, no rupture occurs. Now, it is well established, Dr. P. supposed, that both chloroform and ether do relax the perineum decidedly and promptly; and hence they do not, he believed, increase the rupture of that part during parturition, and the theory itself, if rightly applied, proved just the reverse of what it was generally assumed to prove.

In regard to the greater danger of post-partum hæmorrhage after the use of anæsthetics, Dr. P. remarked that two points were to be borne in mind. (1.) The coagulability of the blood is diminished by the use of ether, as Dr. P. thought had been pretty well established experimentally; and so far, the tendency to hæmorrhage would be increased, and he believed it actually is so, both by chloroform and by ether. But this is a fact of far less importance in obstetrics than in surgery, since (2) the contraction of the uterus after parturition is the natural means of preventing hæmorrhage; and if this occurs, the object is certainly accomplished in spite of the diminished coagulability of the blood. That this contraction does occur as certainly after the administration of anæsthetics, Dr. P.'s own observation would certainly lead him to affirm.

Finally, Dr. P. stated that in obstetric practice he had restricted the use of chloroform almost exclusively to cases of eclampsia and rigidity of the os uteri, and of the perineum. In all other cases requiring an anæsthetic he had, as a general rule, used the vapor of pure sulphuric ether. His reasons it would not be proper for him in this connexion to state at length.

DR. C. R. GILMAN, being invited to make some remarks, was very glad to express the high esteem that he placed upon the paper which had been read, and continued:—The gentlemen who have spoken have generally mingled their commendation with some expressions of doubt and hesitation as to going the whole length with Dr. Barker. It is now, sir, that I take the opportunity of saying that the experience that I have had with chloroform, and I have used it almost exclusively in obstetric cases—has compelled me to say, as the phrase has it, "ditto to my friend." In every one of the propositions that he makes I have no hesitation at all in saying that my experience has taught me to prefer chloroform to ether. I have no doubt, no hesitation in the world in saying, that as often as I have given this agent both in natural labor, in difficult labor, or in the various complications of the process, I have never seen any evil effects follow its use. *Never once!* As to the want of contraction after labor, which has been very much insisted upon, I can only say that I have never seen such a case. Nervous perturbations may exist, but I have never seen them. In short, I have arrived at this conclusion,—I, as at present advised, will not apply forceps without using chloroform!—point blank, will not! If I am overborne in the consultation and cannot help myself, then I say I cannot operate. When I have such an agent as chloroform, which, as I believe, not only relieves suffering but increases by far the chances of the patient's recovery—when, I say, I have such an agent at hand, my conscience will not let me go on without it and operate, when I know that I could do so much better with it. I know, if I know anything, that the chances of recovery from its use are very much augmented. It is not proper that I should detail the reasons or allude to any particular cases in support of such an opinion; every gentleman present, who has used chloroform in the really severe operations, must be satisfied that the woman's chance is increased. Let me just for one moment allude to one particular case, bearing upon this point:—I was called to see a patient who had been in labor twenty-four hours; it was an arm presentation, and the limb had protruded from the vulva fourteen hours. In consequence of misconception of the case by the physician, efforts had been made to push this arm back and bring down the head. As the result of all this, an ordinary careful vaginal examination made the woman actually scream with pain. Under these circumstances, the arm extending from the vulva, and the shoulder packed down in the pelvis like the wad of a gun, I had to contemplate the introduction of my hand into the cavity of the uterus. I was kindly aided in this case by my friend, Dr. Metcalfe, who administered the chloroform. The woman went to sleep, and when the delivery was completed—and the operation was a great deal the most difficult one I ever had—the patient's pulse was slower and calmer than when the operation was begun. The operation occupied one

* Dr. Barker's paper will be found page 350, Vol. III.

hour. What would have been the condition of that patient without the anæsthetic? Scream! scream! shriek! shriek! and then the nervous power all gone. Where would the pulse have been? You could not have felt it!

In conclusion, he referred to one point of practice which Dr. Barker did not allude to in his paper, and that had reference to the administration of anæsthetics after loss of blood. To illustrate this point, he cited the case of a lady suffering from puerperal convulsions, to whom chloroform was administered immediately after bleeding. The woman, continued he, made a little resistance at first to the smell of the chloroform, then took four or five deep inspirations and stopped breathing! Then, after a torturingly long while she took a long breath, and, as the gentleman may imagine, I took another. Now how did it affect this woman?—like a lightning flash. I suppose that the blood-vessels, having been previously pretty well empty, were ready to absorb anything that came in their way. The fact brought out by this case served in future to make me extra-careful with so powerful an agent when much blood had been taken from the system.

Dr. Barker.—The case to which Dr. Gilman refers, I recollect very distinctly. He related it to me shortly after its occurrence. Now it will be remembered in my paper, that I am opposed to the use of chloroform in cases of placenta prævia; and it is the recollection of this case that has always prevented me from administering it, because those cases which I have seen have been so much reduced by excessive loss of blood, that I feared to overwhelm the vital powers; and, moreover, the chloroform was almost rendered unnecessary, as far as any capability for harm was concerned, as the patients were already, on account of this very loss of blood, in a partially anæsthetic condition.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

EXFOLIATION OF MUCOUS MEMBRANES FROM THE WOMB AND VAGINA DURING MENSTRUAL PERIODS.

Dr. E. J. Tilt reports cases of this description in the last number of the *Archives of Medicine*, with some remarks respecting the conditions in which these products originate, and our limited means of modifying these conditions. He is convinced that such cases are more frequent than is supposed, which may often explain the almost indefinite prolongation of disease. A lady aged 25, healthy before marriage, which was at 23, consulted Dr. Tilt in September, 1860. Since her marriage, menstruation became painful, and almost always accompanied by the passing of some flesh-like substance from the vagina. She was also annoyed by the frequent discharge of a gluey matter, which did not yield to tonics and vaginal injections. The neck of the womb was found congested and painful, both lips of the os deeply excoriated and red. It was considered an instance of uterine inflammation produced by marriage; and improved under the influence of an occasional application of the nitrate of silver. The menstrual flow being limited to the discharge of a small quantity of red mucus, she was ordered to bathe her feet in warm water, to inject warm water into the vagina, and apply hot poultices to the abdomen, which not only increased the flow, but there was discharged, with severe pain, an unbroken sac, containing liquid blood. The abraded surface was afterwards coated with the solid nitrate of silver, and alum and zinc injections ordered, with external use of mercurial ointment, and ext. belladonnæ and the iodide of potassium, to be taken in a compound infusion of gentian. The uterine cast, after three days maceration in spirit, was in two fragments, and described as follows:—"When adjusted, they remind one pretty well of the cavity of the wound regularly distended. Each fragment is about two inches and a half in length, an inch and a half wide, and about a line in thickness. One side of these membranes has the rough and floccular appearance of the decidual membrane as it is detached from the womb, and the other side is soft, smooth, and punctuated like the inner surface of the same membrane by the openings of the uterine glands." He regards this case as an instance of sexual influence operating on the womb, either directly or mediately, by the ovaria, causing the periodical exfoliation of the uterine mucous membrane, independent of inflammatory action; the inflammation of the neck being a secondary element of the case, and caused by its forcible distension necessary for the passage of so large a body as is described above. Inflammation of the mucous follicles lining the cervix, explains the abundant ropy discharge; and its alkaline nature accounts for the excoriation of the os. The monthly repetition of expelling a voluminous body through the neck of the womb, counteracted the curative effects of the treatment adopted. The writer says he has never met with a case of deciduous dysmenorrhœa which was not accompanied by inflammation of the neck, which he believes to be the sequel, and cannot induce that condition which causes the mucous membrane of the womb to exfoliate. It is only when distinct symptoms of internal metritis are met with between the menstrual periods, that it can be fairly considered a cause of the exfoliation. The prognosis he considers bad. He has derived benefit from leeching the womb before menstruation, and the treatment adopted in this case. The tendency to exfoliation is sometimes worn out, but often the patients become disheartened at obtaining no relief, and seek other advice; he therefore does not feel able to attribute the radical cure to any one remedy. The coincidence of uterine inflammation, whether cause or effect, shows the utility of leeches to the neck of the womb, of cooling or astringent injections, and of mercurial and belladonna ointment applied to the abdomen. The condition of the os uteri indicates the local application of the nitrate of silver. By dilating the neck of the womb, we accustom it to allow the passage of a foreign body without too much pain, and thereby afford great relief.

POISONING BY BELLADONNA.

A case of poisoning by belladonna is related in the *Cincinnati Lancet and Observer*, for October, by Dr. Willey, of St. Paul, Minnesota. The patient, his own child, ate thirty-five grains of the extract, mistaking it for that of liquorice. The peculiar symptoms of poisoning by this drug were soon manifest, and treatment at once commenced by emptying the stomach by means of sulphate of zinc and ipecacuanha, of some half digested fruit, but no evidence of the poison, either by smell or color. The symptoms increased in violence, and two ounces of olive oil were forced down his throat, and an enema of twelve drops of laudanum in a teaspoonful of water administered, with mustard to the feet and limbs, and cold affusions to the head and face. At length the violent symptoms began to subside, and periods of stupor to supervene, when the bowels not having moved, twenty grains of calomel were given with a view both to its cathartic and eliminating effect, and the stupor combated with vinegar, and strong coffee forced into the stomach, and administered per rectum. Complete coma ensuing, the galvanic battery was put in operation, and the strongest shocks applied over the regions of the thorax, neck, and spine, for four hours, without intermission, when the beneficial results became slightly apparent. The shocks were continued with varying intermissions—according to the stupor—for about fourteen hours. Coffee and beef tea were now administered, and the patient soon had two or three bilious and very offensive dejections. About twenty-two hours after the accident, the pupils began slightly to contract, and in thirty-six hours after the poisoning, the left pupil was smaller than the right, and he saw objects double. This gradually passed off, and entire recovery followed. The efflorescence was observed over the entire body, until the coma and collapse came on, when it was seen only on the abdomen.

DEODORIZING COD LIVER OIL.

The *Louisville Medical News* says—"Cod liver or castor

oil, shaken up with an equal volume of water distilled from off the leaves of the wild cherry tree, in a manner similar to that directed in the *Edinburgh* or *Dublin Pharmacopœia*, for cherry laurel water, and left to rest forty-eight hours before separation, acquires, by this simple operation, an extremely sweet perfume, and agreeable taste of almonds; the taste remains as long as the digestion lasts. Oil flavored in this way, could be taken by many persons who reject it in its natural state. Castor oil is not affected in its purgative action by this process."

American Medical Times.

SATURDAY, JANUARY 18, 1862.

HOMŒOPATHY IN MILITARY HOSPITALS.

The U. S. Senate is engaged in these momentous times in the consideration of a subject, in itself, perhaps, the most frivolous which ever enlisted the thoughts of a rational creature, but which may prove the most important act of the session. Senator Grimes, of Iowa, has introduced a bill placing some of the military hospitals, at Washington, under the charge of homœopathists. We do not know why this class of medical practitioners are honored with such distinction, and we think other systems have a just cause of complaint in being overlooked by a Government which they equally support, and which all are anxious to serve. If Government is about to institute experiments in its military hospitals, with a view to test medical theories, it does not appear why it should pass by Botanics, Hydropaths, Eclectics, Mesmerists, Kneisopaths, etc. Viewing the homœopathic system of practice from a rational, scientific standpoint, it must be regarded as the least worthy attention of any now popular in this country. Indeed, we know of no system so indefensible as that which is engaging the attention of our honorable Senators. With no desire, however, to prejudge a question of so much importance, but earnestly seeking the welfare of our sick soldiers, we deem it our duty to contribute to our legislators such information as may be in our possession, in the hope of aiding them in the formation of correct opinions as to the merits of the medical régime which they are urged to establish in our military hospitals.

This is not the first time that a government has been petitioned to recognise homœopathy, and grant it special privileges. Many European states have not only been thus petitioned, but have granted the prayers of the petitioners, and thoroughly tested its merits. The results of these trials will appear in the course of this article. Similar efforts to have public hospitals placed under their medical charge have also been made in this country by the partisans of Hahnemanism. On the occasion which we shall now notice, the whole subject was so thoroughly sifted, and the false pretensions of this system so completely exposed, that a quietus was put upon their aspirations.

In the year 1857, a resolution was introduced into the Board of Governors of the Almshouse Department, New York, providing "that one-half of Bellevue Hospital should be set apart for the practice of homœopathy." A select committee was appointed to report upon the subject, of which the Hon. Washington Smith, one of the most intelligent civilians of the city, was chairman. The able Report, which this gentleman produced, bears evidence, on every page, of an unprejudiced review of the merits of the system, when thoroughly tested in hospital practice. We earnestly commend to the serious consideration of our Honorable Senators the following extracts from this report.

Alluding to the alleged claims of homœopathy on the ground of its popularity, the committee advance the following eminently just opinions:—

"That this system is wide-spread, and that it has adherents among the intelligent portions of the community, is an argument that applies with equal force to every system of medical empiricism. The opinion of a man of simply general intelligence, has properly no weight in regard to any new theory and its application to practice in any department of the arts or sciences. We should naturally look for a reliable opinion of the merits of such theory to the scientific cultivators of the art in which its application is proposed. Thus tested, the homœopathic system must utterly fail to receive our sanction. We appeal in vain to its adherents to point to a single medical man among its advocates in this city, whose scientific attainments in his own profession would entitle his opinion to our confidence. In no department of science is there more activity in the investigation of the principles upon which it is based, more acuteness in observation, or better logic in the deduction of practical precepts from such principles and observations, than in medicine. And yet the records of science show that all those who truly advance the several departments of medicine, all, without exception, both in this and foreign countries, belong to the ranks of the so-called regular system."

But the Board was urged to grant the request because so many petitions were presented to them from respectable citizens. To this suggestion the Report replies:—

"But whence do these petitions emanate? Do they come to us from the inmates of the hospital who are to be the subjects of the experiment? Do the sick who crowd the wards complain of the incompetency of the medical officers, and of the inefficiency of their treatment, and petition us to change their medical attendants, and introduce a new system of practice? Do these petitions even emanate from the honest laboring classes of our city, whom the vicissitudes of life and the misfortunes of poverty may at any moment remove to the wards of Bellevue for relief to their bodily ills? These are questions which this Board would do well to ponder before it acts."

The body of the Report consists of a careful collation of evidence bearing on the propriety of introducing this system of practice into public hospitals.

"But we are not left to simple conjecture as to the actual success of homœopathy as a system of medical practice. It is our duty, however, to inquire simply as to its success in hospitals; and on this head statistics are sufficiently numerous to prove its entire inefficiency and utter failure wherever it has been tried. The following statistics have been collected with care from authentic sources:—

"In 1829, by order of the King of Naples, a commission was appointed to test homœopathic remedies, under the following restrictions:—1. The Commission shall consist of two professors of the University of the Faculty of Medicine, two members of the Medico-Chirurgical Academy, two members of public instruction, and the heads of the hospital. 2. The Commission, after having proved the attenuation of the homœopathic remedies, shall place the said remedies in a strong box, firmly closed, with two different locks, the keys of which shall be returned, one to the Director of the Clinique, and the other to the commissioners charged with following the treatment. 3. The clinical ward

shall have but a single door, guarded by a sentinel; its internal arrangements shall be adapted to health; it shall not contain more than fifteen to twenty beds, and two assistant physicians, one chosen by the attending physician, the other by the commissioners, who shall keep an exact register of all that happens to the patients, the changes in their diseases, their regimen, cures, and deaths, if any die. 4. The admission of patients affected with acute or chronic diseases, shall be left to the choice of the attending physician and commissioners, with this condition, that the attending physician shall not be obliged to take patients known to be incurable; nor shall diseases equivocal be considered proper for positive experiments. 5. The commissioners having selected the class of diseases, the attending physician shall make known the symptoms, administer the remedies, and prescribe the regimen. 6. Each day the condition of each patient shall be determined by the attending physician and commission. The result of this trial of forty days of homœopathic treatment under the observation of the commission named by the King of Naples, was the conclusion that not only is this treatment of no effect, but that in certain diseases it has the inconvenience of preventing the employment of remedies capable of effecting a cure. The physician in attendance was M. de Horatüs, author of a homœopathic work, and who had boasted of the most marvellous cures.

"Clot-Bey, Physician in Chief to the armies of the Viceroy of Egypt, states (*Annal. de la Med. Physiolog.*, Sept. 1834, *Ency.* Decr. 1834) that a German homœopathic physician petitioned the Council of Health to try this system in the Hospital of Cairo, alleging its cheapness, etc. He was allowed to select, and chose patients suffering from ophthalmia and dysentery. The Counsel were convinced from this experiment that the homœopathic system was not entitled to their confidence. The following is the conclusion of the Report of the Council of Health: That the cures obtained were due simply to the hygienic and dietetic treatment adopted, and not at all to the infinitesimal doses. So unsuccessful did this trial prove, that the homœopathic practitioner was obliged to abandon the country.

"In April, 1832, a ward with thirty beds in the Hotel Dieu de Lyon was placed in charge of M. Guerard, the most distinguished homœopathic physician of that city, with liberty to select his patients. He selected fifteen, suffering from febrile affections, pneumonias, erysipelas, catarrhs, etc. He visited them daily, and in presence of sixty students and several physicians, examined, prescribed homœopathic remedies, and directed the regimen. The experiment continued seventeen days, when the physician voluntarily retired. During this time there was no improvement in patients, nor advantage gained which could be ascribed to the homœopathic treatment. The physician attributed his failure to the action of deleterious miasma *always existing in hospitals*, and from which he could not protect his patients. He acknowledged that the remedies which produced such powerful effects in private practice, utterly failed in hospitals, owing to the emanations from the bodies of persons collected together, which neutralized the infinitesimal doses.—*Gaz. Med. de Paris, Ency. Nov.* 1833.

"In 1834, M. Andral employed homœopathic remedies in one hundred and forty cases, in the Hôpital de la Pitié of Paris. The arrangements of the ward, the regimen of the patients, and all the details of treatment, were carefully managed according to the directions of Hahnemann. The remedies were all obtained from the most eminent homœopathic apothecary in Paris, and administered with the most religious exactness. The result of this trial proved the entire inefficiency of the remedies employed. It was found necessary in most of the cases to resort finally to the regular treatment.—*Bull. Gén. de Thérapeut.* 1834.

"In 1835, the Homœopathic Society of Paris petitioned the authorities to establish a Homœopathic Hospital and Dispensary. The minister referred the matter to the Academy of Medicine, which appointed a Commission to draw up a report. This Commission reported in substance as follows: That they had submitted the system of homœopathy to the most rigid tests in practice, without obtaining any other than negative results, so far as the action of remedies was concerned; while observation proved that grave dangers were liable to follow its adoption in severe diseases, from the neglect of proper and reliable remedies. If the authorities yielded to this request, the advocates of Mesmerism, animal magnetism, etc., were equally entitled to have hospitals opened for the trial of their peculiar systems, and thus every form of quackery would demand attention. They therefore advised that the petition be not granted. The Minister of Public Instruction, acting upon the advice of this Report, refused the petition.

"In 1829, the Czar of Russia ordered that the system of homœopathy should be tried in several military hospitals. For several years the practice was continued, and reports of marvellous success were annually published, but it has entirely failed of obtaining the confidence of Government, and by a recent edict it is forbidden to practise homœopathy in the Russian territories.

"Homœopathy and allopathy were tried (*Ency. Jan.* 1836) in the Hospital of Fultschin for two months, with the following result:

	Entered.	Cured.	Died.	Remaining.
In Allopathic Hospital,	457	364	—	93
" Homœopathic "	128	65	5	58

"Piorry states that he has tried numerous experiments with homœopathic remedies in Hotel-Dieu, all of which failed."—*Ency. Apr.* 1835, *Soc. Sav.* p. 88.

"Bally used homœopathic remedies four months in l'Hotel-Dieu, with the following result, 'pas un malade n'a gueri par l'homœopathie.'"

"Dr. Guillot, of the Salpetrière, gave six beds to the homœopathists, in 1849, for the treatment of cholera. Of seven cases treated, all died.—*Lancet*, 1849, v. 4, p. 542.

"The percentage of mortality in the Homœopathic Hospital of St. Petersburgh, 1833–4, was sixteen and two-thirds per cent.—*Ency. March*, 1835. *Rev. Med.* p. 41.

"Although homœopathy has existed nearly half a century, and boasts of having overspread the civilized world, and received the special patronage of the wealthy of every community as well as government sanction, it claims for itself to-day but seven hospitals in which it is practised on the entire continent of Europe; and within the last year or two several of these have been closed. The great Homœopathic Hospital of Vienna, which has published annually the most wonderful results of treatment, and as far as its reports gave evidence, was entirely successful, has recently ceased to exist.

"The Homœopathic Hospital at Leipsick, the home of the founder of this system, ceased with the death of Hahnemann. The London Homœopathic Hospital has recently closed its doors.

"But we need not multiply facts of this kind: enough has been given to prove to the entire satisfaction of your Committee, that this system has been thoroughly tested in hospitals, and found entirely inefficient. It is quite true that hospitals established by its partisans have published reports of the most flattering success of treatment, but they must be rejected in this discussion, because partisan. If such reports are reliable, why the failure of these very hospitals? Why is the homœopathic system expelled, not only from the hospitals of Russia, in which it has had years to establish itself, but even from the Czar's dominions? These are questions of grave import, and may well give rise to the inquiry in this community, Why are the sick poor of our city selected to be made the subjects of an experiment with this system of medical practice which has so repeatedly failed when put to the test of rigid investigation? If the curiosity of the few *must* be gratified why not choose the criminal for the experiment."

With such facts before them the Committee came to the following conclusion:

"The just pride of every civilized and christian community is its public charities. They are not only the criterion by which we may estimate its christian philanthropy, but also its progress in the arts of civilized life. Well may the citizens of London, of Paris, and other continental cities boast of their hospitals, the growth of centuries, and the merited recipients of public and private endowments. To them flock the students of every country, and from them emanate men learned in the laws of health and disease, and skilled in all the subtile arts of healing. They are demonstrating with mathematical exactness the fact, that wisely and judiciously managed, the average of human life may be materially lengthened. So important, indeed, have they become to the well-being of the people, that they are incorporated with state and city governments. Well may we, under whose fostering care the public charities of our city are placed, inquire what is the character of the medical officers under which these hospitals have attained such celebrity! The answer, without exception, is, that they are of the same school of education and practice as that under the management of which Bellevue Hospital has for the last ten years so signally prospered. They have been men of professional learning, eminent as citizens, and often as statesmen, but always of one school—the so-called regular practice."

No unprejudiced mind can review such facts, without concluding that public authorities who deliberately consign the helpless and confiding sick to the charge of medical men practising a system so inefficient, incur a fearful responsibility. And that responsibility assumes a tenfold importance when the sick, who are to be subjected to this experiment, are the citizen soldiers who have sacrificed the comforts of home in defence of their country. Around them Government should throw its protecting care, and tenderly guard their sick beds from the ruthless hand of medical charlatanism.

THE WEEK.

New York is not only a great commercial centre for inland trade, but it supplies to the cities and villages of the continent, many of the contagious and infectious diseases with which they are afflicted. From its inexhaustible supply of small-pox, the nation is annually inoculated. At Washington, this loathsome pestilence is rife; it prevails extensively, also, in Brooklyn. The following paragraph, from the Providence (R. I.) *Evening Press*, of Jan. 11, indicates the source of this infection:—

"Nine-tenths of the small-pox in this city comes from New York. There are now cases of *varioloid* on Friendship street, Transit street, and on Smith's Hill, all appearing within a few days, and all coming from New York. One of these cases, before the disease was recognised, spent some days in Pawtucket, and many persons have been exposed there and here. Those who are not protected by vaccination cannot attend to it too soon."

Providence has a most efficient sanitary police under the supervision of Dr. Edwin M. Snow, an able sanitarian and accomplished physician. So thorough is his surveillance of the public health, that small-pox is only known as an imported disease.

One of two things is absolutely required; either that New York should abandon its pretensions to be the mart of the country, or that it should relieve itself of those preventable diseases, which are so readily disseminated by every visitor and in every box of merchandise. The interdependence of the health of cities is well illustrated by this fact. It matters little what is the state of the public health in Brooklyn, or even Providence, while New York is the great hot-bed of preventable diseases. Inter-communication will inevitably diffuse the seeds of these scourges of the poor, and they will certainly take root. This is a matter in which the public at large are interested. New York will not voluntarily reform its health department. There should come up a voice from the country, so powerful as to compel the necessary improvements.

—

We notice in the *Medical Monthly* the announcement of a new work on *New Remedies*, by Drs. S. R. Percy and L. Elsberg, of this city. It is designed to embrace "all valuable medicinal agents introduced into the treatment of disease since the year 1830, detailing their history, description, action, and uses, and giving the most approved formulæ of preparation, preservation, and administration." The authors are collecting their materials for the work, with the design of issuing it when our national difficulties are settled.

—

The friends of sanitary reform in this city attribute the defeat of the Health Bill in the New York Legislature, three times in succession, to bribery of the basest kind. At the last session the Bill had acquired such a moral power, and was in such imminent danger of becoming a law, that the opponents of the measure had to give money on the most liberal scale. A morning paper stated during that period: "We understand that $10,000, in cold cash, went up from our city to Albany on Friday night, to defeat the Metropolitan Health Bill. This was an *extra* sum, and is understood to be on account of Street Sweeping." Many excellent, conscientious persons deny the corruptibility of our Legislators, and rejecting all surmises, ask positive evidence. At length they are gratified. One of our City Fathers, who knows that whereof he speaks, if he does not always speak that whereof he knows, has publicly declared that he defeated the New York Health Bill last year by buying up the Legislature. At a meeting of the Board of Aldermen, on Monday evening, the following interesting colloquy occurred:—

"The annual report of the City Inspector was received.

"Alderman Boole moved that 5000 copies be printed.

"Alderman Brady thought that 1000 copies were enough. There was no use printing a large number to kill the Health Bill in the Legislature. They had killed it three years by hard dollars, and that was where they beat the doctors. *He knew the Legislature could be bought. That was what they got the bills up for. He had been up to Albany last year and bought up the Legislature.*

"A Voice:—'How much did it cost?'

"Mr. Brady:—'Well, sir, I took up $6000, and slept on it between two beds at the Delavan House. I had to come down to get $2000 more. But they may pass whatever bills they like; we won't interfere with them.'"

Is it not time that the citizens of New York take notice of the manner in which great public measures are defeated at Albany! Will they rest quietly under the odium of this charge, and allow the agents of bribery and corruption to boast their infamy in the public courts of the city?

—

The Fifty-fifth Annual Meeting of the Medical Society of the State of New York will be held in Albany on Tuesday, the 4th of February. In another column will be found a communication from the Secretary, Dr. Sylvester D. Willard, to which we invite especial attention, not only for its

just and pertinent allusions to the obligations of the profession of the State to this Society, but also for its explanation of the rules governing the election of delegates.

—

The reader will find below a highly interesting letter on the sanitary condition of the army of the Potomac, by a most competent medical observer. It will gratify the profession to learn from such a source the high qualifications of the army surgeons of the volunteer forces, and the care that is taken of the physical wants of the soldiers. We but repeat, we believe, the wish of every reader that the talented author would communicate his views on the diseases now prevalent in the camps.

—

At the last meeting of the New York Pathological Society the following officers were chosen for the coming year:—Dr. T. C. Finnell, President; Drs. A. Voss and D. S. Conant, Vice-Presidents; Dr. Geo. F. Shrady, Secretary; and Dr. William B. Bibbins, Treasurer.

Useful Inventions.

Kidder's Electro-Magnetic Machine.

The employment of electro-magnetism in medicine is beginning to assume a proper importance. Since the investigations of Matteucci, Du Bois-Reymond and others have thrown a flood of light upon obscure nervous affections, and have led to a proper appreciation of treatment. That electro-magnetism is hereafter to form no inconsiderable part of this treatment cannot be denied, and we must welcome any invention which tends to place this agency within the reach of the practitioner. The electro-magnetic machine of Mr. Kidder is one of the most useful inventions of the kind with which we are acquainted. It has six currents differing in their magnetic, electrolytic, and sensational effects. It is very portable, and very easily kept in good condition. We have witnessed its frequent employment in various medical cases, and the results have convinced us that in the hands of the judicious, scientific physician, a large class of diseases are more amenable to such treatment than to any therapeutical means.

Correspondence.

SANITARY CONDITION OF THE ARMY OF THE POTOMAC.

[To the Editor of the American Medical Times.]

Sir:—Having just returned from an extended visit to our camps in Maryland and Virginia, I cannot refrain from expressing the great gratification I have experienced from what I have seen and heard, regarding the medical skill, care, and attention bestowed upon our troops, by the various regimental, hospital, and brigade surgeons, now in the employ of our Government. It is true that a great proportion of the surgical corps of the volunteer regiments are young men, but they appear remarkably well posted in all matters relating to sanitary, medical, and surgical sciences, and they very generally seem actuated, not only by an honorable desire of professional distinction and reputation, but also by the higher motives of patriotism and humanity. Knowing something from personal observation, of the kind and degree of medical and surgical skill bestowed upon the sick and wounded of the armies of foreign lands, I have no hesitation in expressing my belief, that in these respects our army surgeons will compare most favorably with those of any European army. In matters relating to hygiene and sanitary police, they are undoubtedly in advance of those of any other nation. Never have the sick and wounded of any army, of which we have any record, enjoyed so many luxuries, such careful and skilful nursing, and such judicious medical and surgical treatment as our soldiers in Maryland, and over the Potomac, and doubtless, also, in other sections. Of course, there are individual exceptions to these remarks:—A few of our army surgeons are occasionally, if not habitually, intemperate; but such cases are comparatively rare, and in spite of every care and precaution, will sometimes occur. In the Blenker division I found the average number of sick to each of the fifteen regiments, of which it is composed, fourteen in hospital, and six in quarters. In Sumner's and Heintzelman's divisions, in the neighborhood of Alexandria, the amount of sickness is believed to be somewhat greater, owing to the greater prevalence of malaria in that locality. There is often a great difference in the healthiness of camps situated near each other, and apparently subjected to the same climatic and malarious influences. While this is, unquestionably, partly owing to the greater attention paid to sanitary police regulations in some encampments than in others, this difference may often be traced to the greater moral influence exerted by some of the regimental officers, and the better discipline observed, rather than any special efforts exerted in this direction by the surgeons of the regiment. So far as I observed, the greatest amount of sickness is found in some of the N. Y. volunteer regiments, as the 54th and 58th, which I am inclined to attribute chiefly to the imperfect or non-inspection of the men, at the time of their enlistment. To the same cause may be attributed the frequent applications for discharge, on account of ill health, and the numerous discharges for the same cause, and for inefficiency, now going on extensively in some of the regiments, amounting, in some cases, to full twenty-five per cent. A very large number of the troops recruited in our large cities were men of intemperate habits and broken constitutions—many of them laboring under latent disease, or thoroughly pre-disposed thereto—unable to bear the fatigue and exposure of camp life, and quickly succumbing to fevers, dysenteries, and the other diseases of armies. Many of these are now being discharged, and sent home. I have everywhere found the health of the soldiers belonging to the regular U. S. Army far better than in the volunteer regiments. In the 5th regular cavalry regiment, for example, Col. Oakes, stationed near Georgetown, there has been no death during the last six months, except from wounds received in battle, or from other casualties. A similar exemption may occasionally be met with among the volunteers, as in Col. Duryea's regiment, on Federal Hill, Baltimore; but such instances are extremely rare. I am inclined to believe, from my observations made among the soldiers on both sides of the Potomac, that there is proportionally a greater amount of sickness among them on the north than on the south side of the river. The measles and mumps are quite prevalent among the New England regiments here located, which, though rarely fatal, are often followed by sequelæ which incapacitate the soldier for a long time for duty. These affections are often followed by, or complicated with, erysipelas, pneumonia, ophthalmiæ, and general debility, which require, and generally receive skilful and judicious management. I have no positive evidence that the mortality among the New England soldiers is greater than among those from New York and Pennsylvania, but such an impression very generally prevails. In General Sumner's division, at Alexandria, I was informed by Brigadier Surgeon Dougherty, that the mortality for several months past would not exceed the annual ratio of 1½ per cent. of the entire force. This would be a very extraordinarily healthy rate in ordinary civil life.

I was greatly pleased, also, to see the great regularity and neatness of the camps everywhere. The most advantageous locations were generally selected, drainage well attended to, and the tents well warmed by stoves, or other

contrivances. Usually the tents were floored, but in some of the regiments the men sleep on the ground, which is, however, baked hard, and well dried. In many instances the ventilation is very imperfect, and too many are crowded into a single tent; the Sibley tents, for example, being often occupied at night by sixteen men, who lie on the ground, with their feet towards the stove in the centre of the tent. Great attention is very properly paid to cleanliness throughout the encampments; all refuse and decomposing matter being removed to a considerable distance. Still it must be acknowledged that the health of the soldiers would be improved by a more frequent removal of the camps; for a large amount of decaying matter inevitably accumulates in and around the tents, which undergoes more rapid decomposition from the high artificial heat which is kept up inside the tents. In most of the camps visited, the men were erecting wooden barracks for winter quarters; these were generally small, but sufficiently spacious for two, covered with canvas, and furnished with many comforts and conveniences. The soldiers were generally cheerful, contented with their accommodations, so far as is consistent with the life of comparative inaction, but unanimously anxious to move forward, and meet the enemy. The army is well clothed and well fed; there was but one answer to the question, "Have you enough to eat?" and that was, "Yes, more than enough." Most of the men seemed to me to regard campaigning as a kind of holiday life, replete with fun and jollity, and somewhat fearful that it might terminate too speedily. The many curious devices and ornaments with Christmas greens, with which many of the camps were profusely decorated, show that the soldier is not insensible to the æsthetic.

I have referred, in general terms, to the very judicious and skilful hospital treatment of the soldiers, and their extraordinarily careful and attentive nursing. In these respects, in all the regular and established army hospitals, there is but little room for improvement. The nurses, both male and female, seem thoroughly to understand their business; and there is, generally, no lack of jellies, cocoa, arrow-root, lemon-juice, dried fruits, and other delicacies. Notwithstanding the objections I have seen raised against female nurses in our army hospitals, it is only necessary to see, how, like angels of mercy, they are regarded by the poor sick soldier; and how their soft, kind, and gentle ministrations carry comfort to his heart and consolation to his spirit; to be satisfied that their services cannot well be dispensed with. There are some other topics, such as the special treatment of typhoid fever, pneumonia, dysentery, remittent fever, and of some other diseases, etc., to which I intended to allude; but as my letter is already too extended, I conclude by saying, that I have been equally interested and gratified by my recent visit to our army of the Potomac. L.

New York, Jan. 6, 1862.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.

[To the Editor of the American Medical Times.]

Sir:—Through the columns of the Medical Times, as well as by special notice, I desire to remind the members of the Society, and the profession generally, that the Fifty-fifth Annual Meeting of the Medical Society of the State of New York, will convene in Albany on Tuesday, February 4th, 1862. To those who are in the habit of attending these annual meetings, it will be unnecessary to speak of the pleasure and the profit, socially and professionally, that they afford. It is not too much to say that they are regarded as festive days in the tedium of professional life. They are looked forward to and remembered only with pleasure. They are the occasions of many new friendships, and the renewal and strengthening of many old ones.

It is important that at this period in our national history, when the attention of the profession has been so largely occupied by questions involving the interests of life and health to our army, on which, in a measure, our national existence depends, and when so many of the profession from our own state have entered public service in the Army and Navy, the interests of our society should be neither forgotten, overlooked, nor neglected—that its annual meeting should not, like that of the American Medical Association, be postponed; but that it should suffer no diminution in the number in attendance. Questions of greater importance and of more general interest were never before presented to our profession for consideration and discussion. A new era in hygiene and sanitary measures is being inaugurated; a new era in the science of military surgery in this country is constantly being unfolded, and members of our society are among the leaders and participators of these events. Sufficient has always occurred to awaken a keen interest in our approaching meeting, and can it be otherwise than largely attended?

It may be well to repeat what was mentioned last year, viz. that delegates must, in accordance with the law of the state, *be duly elected* by the respective societies which they represent. Societies cannot *appoint* delegates, nor can they *appoint* or elect *substitutes*. An election can be held to fill a vacancy at any time upon due notice, so that if a delegate cannot attend he may resign his office, and the vacancy be at once filled. The certificates should in every case read that Dr. —— *was duly elected for the ensuing four years*, unless the election has been in order to fill a vacancy, when it should be definitely stated by whose resignation the vacancy occurred, and at what time his term would expire. By a little care on the part of the officers of county societies, much valuable time will be saved to the state society and its committee on credentials, and delegates will be spared great annoyance (like that experienced by the New York Delegation last winter). Each county medical society is entitled to as many delegates as its county has members in assembly. Each medical college is entitled to one delegate, and the New York Academy of Medicine to five, all to be *duly elected* for the term of four years. Bellevue Hospital College, a new institution, and a promising one, will be entitled to one delegate. The law has not yet been enacted to admit delegates from the several Insane Asylums, and the Asylum for Idiots, in accordance with the resolution passed in February last. Efforts will be made to secure its passage before the time of the meeting. Last year only twenty-six medical societies, three colleges, and the Academy of Medicine were represented. It is to be hoped that the number will be much greater at the approaching meeting.

Of course it is expected that every member will bring a fitting contribution to medical science, from which to enrich the pages of the yearly transactions; although an experience of ten years does not lead us to expect that all of these contributions will be in chirography easy for the printer to decipher!

Sylvester D. Willard, M.D.,
Albany, Jan. 11, 1862. *Secretary.*

Medical News.

Brooklyn City Hospital.—During the year 1861, 1,256 persons received the benefits of this hospital with the following result:—Cured, 672; relieved, 220; discharged at their own request, 50; disorderly or eloped, 120; died, 70; number remaining, 124. The number who paid wholly or in part was 1,038; wholly charity, 218; males, 1,177; females, 79. Of the 70 deaths, 37 were Coroner's cases (accidents), leaving the actual number of deaths by disease 33. Whole number of rations issued during the year, 50,591. Of the charity patients, 173 were accidents sent by the city. The average time of each accident case was 57 days, making for those sent by the city equal to 1,400 weeks, which, at $3 per week, amounts to $4,227; 520 of the patients were natives of the United States.

TO CORRESPONDENTS.

J. C. R. (*Ohio*).—Paper received; your commnnications are always welcome.

E. A. (*Yonkers, N. Y.*)—Pamphlet and paper received; the subject should be brought before the State Society; we shall soon notice it again.

G. A. D. (*Mexico, N. Y.*)—Yon will receive a letter.

A. H. (*Dubuque, Ia.*)—Paper received and will appear soon.

MEDICAL DIARY OF THE WEEK.

Monday, Jan. 20.	New York Hospital, Dr. Peters, half-past 1 P.M. Bellevue Hospital, Dr. Thomas, half-past 1 P.M. Obstetric Section, Dr. Underhill, 8 P.M.
Tuesday, Jan. 21.	New York Hospital, Dr. Watson, half-past 1 P.M. Bellevue Hospital, Dr. Loomis, half-past 1 P.M. Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
Wednesday, Jan. 22.	New York Hospital, Dr. Cock, half-past 1 P.M. Bellevue Hospital, Dr. Sayre, Is. Ilos., half-past 1 P.M. New York Pathological Society, half-past 7 P.M.
Thursday, Jan. 23.	New York Hospital, Dr. Peters, half-past 1 P.M. Bellevue Hospital, Dr. Taylor, half-past 1 P.M. Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
Friday, Jan. 24.	New York Hospital, Dr. Watson, half-past 1 P.M. Bellevue Hospital, Dr. Flint, half-past 1 P.M. Eye Infirmary, Dr. Noyes, half-past 1 P.M. Surgical Section, Dr. Wood's, 8 P.M.
Saturday, Jan. 25.	New York Hospital, Dr. Cock, half-past 1 P.M. Bellevue Hospital, Dr. Wood's Clinic, 1 P.M. Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICES.

The Surgical Section *will meet at the house of* Dr. J. R. Wood, 2 *Irving Place, at* 8 *P.M., on Friday, Jan.* 24.

The Regular Monthly Meeting of the Obstetric Section *will be held Monday, Jan.* 20, *at the house of* Dr. Underhill, 44 *E.* 20*th street, at* 8 *P.M.*

Wade & Ford are now manufacturing DR. JOSEPH H. VEDDER'S walking splint for Morbus Coxarius.

Rensselaer Polytechnic Institute, Troy, N. Y.—The seventy-sixth semi-annual session of this Institution for instruction in the Mathematical, Physical, and Natural Sciences, will commence Feb. 19th, 1862. A full course in Military science is now in progress.

Further information, with the Annual Register, can be obtained of Prof. Charles Drowne, Director.

BOOKS
ON
MILITARY SURGERY.
FOR SALE BY
BAILLIERE BROTHERS
440 BROADWAY.

JUST RECEIVED, COMPLETE COLLECTIONS OF THE ENGLISH GOVERNMENT REPORTS ON THE MILITARY MEDICAL DEPARTMENT, VIZ.:

Medical and Surgical History of the British Army, which served in Turkey and the Crimea during the War against Russia in the years 1854-5-6. 2 vols. 4to. London, 1858. $12.50.

Report of the Commissioners appointed to inquire into the regulations affecting the Sanitary Condition of the British Army, the Organization of Military Hospitals, and the Treatment of the Sick and Wounded; with Evidence and Appendix. 4to. London, 1858. $10.

Report of the Proceedings of the Sanitary Commission despatched to the Seat of War in the East, in 1855-56. 8vo. London, 1857. $4.

Statistical, Sanitary, and Medical Reports of the British Army, for the year 1859. London, 1861. $2.50.

General Report of the Commission appointed for Improving the Sanitary Condition of Barracks and Hospitals in the British Army. Folio. London, 1861. $2.50.

As these Reports are now difficult to be procured, intending purchasers are requested to make early application for them.

Armand, Histoire Medico-Chirurgicale de la Guerre de Crimée. 8vo. Paris. $1.85

Baudens.—La Guerre de Crimee, les Campements, les abris, les ambulances, les hopitaux, &c., &c. Second edition, 12mo. Paris, 1858. $1.

Bertheraud.—Campagne d'Italie de 1859. Lettres Medico-Chirurgicales écrites du Grand-Qnartier général de l'armée. 12mo. Paris, 1860. $1.00.

Bertheraud. Campagnes de Kabylie. Histoire Medico-Chirurgicale des Expeditions de 1854, 1856, and 1857. 8vo. Paris, 1862. $1.86.

Boudin.—Resumes des dispositions legales et reglementaires qni president aux operations medicales du recrutement, de la reforme et de la retraite dans l'armée de terre. 8vo. Paris. 50 cts.

Boudin.—Systeme des Ambulances des Armées Francaises et Anglaises. 8vo. Paris. 87 cts.

Boudin.—Souvenirs de la Campagne d' Italie. 8vo. Paris. 75 cts.

Cazalas. Maladies de l'Armee d'Orient. Campagne de 1854-55-56. 8vo. Paris, 1860. $1.25.

Fraser. A Treatise upon Penetrating Wonnds of the Chest. 8vo. London, 1859. $1.60.

Gross, S. D.—A Manual of Military Surgery; or, Hints on the Emergencies of Field, Camp, and Hospital Practice. 24mo. Philadelphia. 50 cents.

Guthrie.—Commentaries on the Surgery of the War in Portugal, Spain, France, and the Netherlands. With Additions relating to the War in the Crimea. 8vo. London. $4.65.

Hamilton, F. H.—A Practical Treatise on Military Surgery. Fnlly illustrated. 8vo. New York: 1861. $2.

Jacquot. Du Typhus de l'Armee d'Orient. 8vo. Paris, 1858. $1.87.

Notes on the Surgery of the War in the Crimea, with Remarks on the Treatment of Gunshot Wounds. By George H. B. MacLeod, M.D. Philadelphia, 1861. $1.50.

On Fractures of Bones and Resection in Gnnshot Injuries. By Dr. Louis Stromeyer. 8vo. London. $1.87.

Outlines of Military Surgery. By Sir George Ballingall, M.D. 5th edition, 8vo. London. Price $4.00.

Saurel.—Traite de Chirurgie Navale, suivi d'un resnmé de Leçons snr le service chirurgical de la flotte, par le Dr. J. Rochard. 8vo. Paris, 1861. $2.10.

Scrive. Relation Medico-Chirurgicale de la Campagne d'Orient. 8vo. Paris, 1857. $2.00.

Tripler & Blackman.—Hand-Book for the Military Surgeon. 12mo. Cincinnati. $1.

Warlomont. L'Opthalmie Militaire à l'Academie Royale de Medecine en Belgique. 8vo. Bruxelles. $2

Williamson.—Notes on the Wounded from the Mutiny in India. With a Description of the Preparations of Gun-Shot Injuries contained in the Mnseum at Fort Pitt. 8vo. London. $3.75.

FOREIGN MEDICINES, AND Druggists' Articles.

GAUDELET & GOURÉ,

IMPORTERS & COMMISSION MERCHANTS,

32 Platt St. NEW YORK. 32 Platt St.

IMPORTATION ON ORDER OF Foreign Perfumery AND *Druggists' Articles*

ALBESPEYERS—Epispastic Paper.
do Blistering Tisane.
do Issue Paper.
ANDURAN—Anti-gout Wine of Anduran.
AUBERGIER—Syrup of Lactucarium.
do Paste of Lactucarium.
AYMES Licorice Drops, Violets perfume.
BARRESWILLE—Tannate of Quinine Pills.
do do do Lozenges.
do do do Powder.
BELLOC—Vegetable Charcoal Powder.
do do do Lozenges.
BERAL—Tartrate of Potash and of Iron.
do Citrate of Iron.
do Carbonate of Iron.
do Citrate of Iron and of Quinine.
do Lactate of Iron.
do Iron reduced to Hydrogen.
do Officinal Chalk without odor.
do Dragees of Lactate of Iron.
do Ferrugineous of Nancy for Rusty Water.
do Lozenges of Citrate of Iron.
do do of Lactate of Iron.
lo Saccharine of Citrate of Iron for Rusty Water.
do Syrup of Citrate of Iron.
do Syrup of Iodide of Iron.
do Poor Man's Plaster.
BERTHE—Cod Liver Oil.
do Syrup of Codeine.
BILLARD—Creosote.
BLANCARD—Pills of Iodide of Iron.
do Syrup do do.
BONJEAN—Dragées of Ergotine.
BOTOT—Tooth Water.
do Tooth Powder.
BOUDAULT—Anti-Dyspeptic Pepsine.
do Additional Pepsine.
BOYVEAU—Rob Boyveau Laffecteur.
BRIANT—Syrup Antiphlogistic.
BROU—Injection.
BUGEAUD—Balsam for the Nerves.
CASTOO of Bologne.
CAUVIN—Digestive Pills.
CHABLE—Injection.
do Syrup of Citrate of Iron.
do Depuratif Vegetal.
do Mineral Bath.
do Perfumed Bath.
do Toilet Water for Ladies.
do Anti-Tetter Pomatum.
do Pomatum for Piles.
CHARLES ALBERT—Bol of Armenie.
do Wine of Armenie.
CLERAMBOURG—Golden Pills.
do Grains of Life.
do Cough Syrup.
do Paste.
CLERET—Iodide of Potassium Rob.
do Pills of Iron and of Quinine.
CLERTAN—Pearls of Ether.
do do Chloroform.
do do Assafœtida.
do do Castoreum.
do do Digital.
do do Valerian.
do do Ess. of Turpentine.
COLTAS—Benzine in Bnik.
do Dragees of Santonine.
COURCELLES—American Elixir.
CROSNIER—Syrup Mineral and Sniphurons.
do Pills of Iodide of Iron and of Quinine.
DAROLLES—Rum Punch.
DEGENETAIS—Pectoral Paste.
do Syrup of Cait Lunga.
DEHAUT—Purgative Pills.
DELABARRE—Toothing Syrup.
DELANGRENIER—Nafé Paste.
do Syrup of Nafé.
do Racahout des Arabes.
DESBRIERES—Magnesia Chocolate.
DICQUEMARE—Melanogène (hair dye).
do Fixateur (for the hair).
DORVAULT—Horse Radish Syrup.
DUPONT—Regenerator.
do Anti-Glairous Elixir of Guillie.
DUSQUERD—Ferruginous Syrup.
EAU—De Melisse des Carmes.
ESPIC—Pectoral Fumigator.
FAYARD—Paper.
FLON—Lenitive Syrup.
FORGET—Cough Syrup.
FRANK—Grains of Health.
GAFFARD—Granules of Digitaline
do do of Atropine.
GARNIER LAMOUROUX—Sugar-Coated Pills.
GAUTIER-LACROZE.—Syrup of Aconite.
do Balsam of Aconite.
GELIS & CONTE—Dragées of Lactate of Iron.
GENEVOIX—Iron reduced by Hydrogen.
do Anti-Gout or Oil of Horse-Chestnut.
do Dragées of Iron redneed.
GEORGE—Pectoral Paste.
GILLE—Dragées of Proto-Iodide of Iron.
do Depuratives Dragees of Lepetit.
do Syrup Proto-Iodide of Iron.
GUERIN—Balsamic Opist.
GUILLIE—Anti-Glairous Elixir.
GUILLIERMOND—Syrup Iodo-Tannique.
HEMEL—Powder for Dogs.
HOGG—Cod Liver Oil.
do Pills of Pepsine.
do do do and Iron.
do do do and Proto-Iodide of Iron.
HOMOLLE & QUEVENNE—Granules of Digitaline.
HUFELAND—Digestive Liquor.
JOY—Pectoral Fumigator, Anti-Asthmatic.
KERATOPHILE—Pomatum for Horse Hoofs.
LABARRAQUE—Disinfecting Fluid.
do Wine of Quinium.
do Pills of Quinium.
LABELONYE—Syrup of Digitale.
LAMOUROUX—Syrup of "
LAROCHE—Wine of Quinia Bark.
LARREY—Cleansing Syrup.
LARTIGUES—Anti-Gout Pills.
LAURENT—Medicated Dragées.
LAVILLE—Anti-Gout Pills
do do Liquor.
LEBEL—Scordium Powder.
do Savonules of Copaiba.
LECHELLE—Hemostatic Water,
do Castoreum Nevrosine.
do Anti-gout.
do Anti-Dolour, Silk.
do Cleansing Syrup of Larrey.
LECHELLE—Cubeb, Solid and Concentrated.
do Anti-Putrid Water.
do Anti-Fever Powder.
do Collyre Divin (Eye Wash).
LERAS—Liquid Phosphate of Iron.
do Dragées of do do.
do Syrup of do.
LEROY—Vomitif.
do Purgatif.
do Pills.
MATHEY-CAYLUS—Capsules pur Copaiba, &c.
MEGE—Pur Copahine, &c.
MENE MAURICE—Acoustic Oil.
MONDINI & MARCHI—Cachou of Bologne.
MOTHES—Capsules of Copaiba.
do do of Cod Liver Oil.
MOURIES—Farina for Children.
do Chocolate do.
NAFE—See "Delangrenier."
OLIVIER—Depurative biscuit.
PAUL GAGE—Taffetas.
do Anti-glairous Elixir of Guillié.
PELLETIER—Elixir and Odontine.
PEPSINE—See "Boudault."
PERSONNE—Iodine Oil.
PETREQUIN—Pills of Proto-Iodide of Iron.
PHILIPPE—Tooth Wash
do Tooth Powder.
do do Charcoal and Quina.
do Kousco, ordinary dose.
do do strong dose.
PIERLOT—Valerianate of Ammonia.
PRODHOMME—Essence of Sarsaparilla.
QUERU—Cod Liver Oil Jelly.
QUEVENNE—Dragées of Iron reduced.
RACHAOUT—See "Delangrenier."
RAQUIN—Copaiba Capsules.
REGNAULT—Pectoral Paste.
ROBIQUET—Syrup of Pyro-Phosphate of Iron.
do Dragées of do do
DR. ROUSSEAU—Celestial Water for the Eyes.
ROYER—Cod Liver Oil.
ROGE—Citrate of Magnesia Powder.
do do Lozenges.
SAMPSO—Injection.
SEDLITZ—Powder.
SEGUIN—Wine.
SEIGNORET—Lozenges of Iodide of Potassium.
SODA—Powder.
TRANCHE LAHAUSSE—Regenerator.
VALLET—Ferruginous Pills.
VICHY—Water.
" Lozenges.
" Chocolate.
" Mineral Salts.
ZUCCANI—Benzine.

Articles always on hand.

DR. VALLEISE—Suspensories, Trusses, and patented Elastic Appliances, &c.
BREURE-PERIN—Vinaigre a la Glycérine.
do Soap Glycerine.
do Paste, do *g. modèle.*
do do do *p. modèle.*
do Perfumed Glycerine.
DR. PIERRE—Dentifrice Water.
do Vinaigre, Toilet Vinegar.
do Roses Toilet Vinegar.
HOUBIGANT-CHARDIN—Perfumery.

NOTICE.—We beg to advise our Customers, that our frequent and direct intercourse with the owners of the above Medicines, as their Agents or Consignees, allows us to assure them, that by addressing their orders to us, they will surely avoid the Spurious Articles, and at the same time, always obtain the very lowest prices.

Toilet Articles! Brushes, Shell-combs, &c.

Orders received and promptly executed for the following articles.

Medicinal Herbs.
Homœopathic preparations.
Utensils for laboratories.
Surgical Instruments.
Vulcanized Instruments of Galante.
Apparatus for Gaseous Water.
Philosophical Instruments.
Chemical do.
Fancy labels for druggists.
Ordinary and philosophical scales.

Glass, crystal, and china vases.
Scientific books.
MAUGENET & COUDRAY Perfumery.
DEMARSON CHETELAT do.
LUBIN do.
VIOLET do.
PIVERT do.
SOCIETE HYGIENIQUE.
MONPELAS do.

Original Lectures.

CLINICAL LECTURES ON THE PUERPERAL DISEASES.

DELIVERED AT THE BELLEVUE HOSPITAL MEDICAL COLLEGE.

By B. FORDYCE BARKER, M.D.,

PROFESSOR OF MIDWIFERY AND DISEASES OF WOMEN, ETC., ETC.

LECTURE I.—PART I.

ON PUERPERAL CONVALESCENCE.

GENTLEMEN:—In our lying-in wards, where we have monthly from forty to fifty or more cases of labor, you have the opportunity, found nowhere else in this country, of studying clinically, and becoming practically acquainted with every variety of puerperal disease. You have, already, seen most interesting cases of some of the forms of post-partum inflammation, of puerperal convulsions, mania, and puerperal fever. Before discussing the various pathological conditions incidental to the puerperal state which you have and will see in our wards, let us first study normal puerperal convalescence. This includes two distinct classes of phenomena: first, the restoration of the pelvic organs, which, during gestation and parturition, have been the seat of extraordinary modifications in tissue, function, and position, to their normal state; second, the development of a new function for the nutrition of the infant, lactation.

Puerperal convalescence is normal, when these two conditions are perfectly attained without injury to the health of the mother or child. During gestation, the organs concerned in this function are the seat of a most active evolution, which exerts an important influence over all the vital functions and culminates in the process of parturition.

During the forty weeks of utero-gestation, the uterus enlarges from nearly three inches in length, and one and three-quarters in breadth, to twelve or fifteen in length, and nine or ten in breadth. It increases from about two ounces in weight to twenty-five or thirty ounces. Its cavity, before impregnation, is less than one cubic inch, while, at the full term of pregnancy, it is extended to above four hundred cubic inches, and the surface of the organ increases from about five or six square inches, to nearly three hundred and fifty square inches (Simpson). Its serous tissue undergoes a corresponding extension, and as this takes place without a decrease in thickness, it must be the seat of a much more active nutrition to prevent its attenuation. Its lining or mucous membrane becomes actively hypertrophied, constituting the decidua, which, after parturition, is exfoliated, and a new mucous membrane is formed.

The reduction of the uterus after delivery to its normal size, its involution, as it is termed, takes place by fatty transformation of its component fibres, and absorption. The cicatrization of its internal surface is accomplished by the exudation of organizable lymph and the development of a new layer of mucous membrane. This rapid exposition of some of the physiological changes which take place during puerperal convalescence is necessary, in order that we may properly appreciate the clinical phenomena pertaining to this period.

During the first hours after delivery, the genital organs are more or less swollen and painful. The vagina is distended, soft, and bloody. It has, of course, been very much stretched by the passage of the child, but it is so elastic that it soon recovers its natural state. The anterior edge of the perineum is often slightly torn in first labors, but, if it be not more than this, it is of no consequence. The uterus should be felt firmly contracted, as a hard, round tumor, about the size of an infant's head, just above the pubes. It gradually diminishes in size, until it sinks into the pelvis. It ordinarily cannot be felt above the pubes after the tenth or twelfth day, although in some it may be so late as the sixteenth.

Prof. Murphy divides puerperal convalescence into three periods: first, the interval between the birth of the child and the commencing secretion of milk; second, the period during which the function of lactation rises to its highest point of activity; and third, the period occupied in restoring the uterus to its original condition previous to conception. The first hours after delivery should be a period of repose. The patient, by proper management, should be secured a sound and refreshing sleep. If the labor has been a severe and tedious one, and in all cases where operative procedures have been required, I am in the habit of giving a full opiate, that is, a grain of opium, or the equivalent of some of its preparations, as soon as the binder has been applied and the soiled clothes under have been removed. Everything which would disturb or excite her should be carefully avoided, and she should be kept perfectly quiet.

After-Pains.—Sleep is sometimes prevented by severe after-pains, which may come on soon after delivery. They may be even more severe than ordinary labor pains, particularly in those who have borne many children. By proper management, much may be done by way of preventing their occurrence. They are usually the result of the presence of coagula in the cavity of the uterus, which distend its walls and excite spasmodic contractions. If firm, steady pressure is kept over the fundus of the uterus during the time the trunk of the fœtus is expelled, and this pressure is not suspended until after the delivery of the placenta and the binder is properly applied, a permanent contraction of the uterus is secured, which so effectually closes the open mouths of the utero-placental vessels as greatly to diminish the amount of blood poured into the cavity. If the second stage of labor be too rapid or too prolonged, I give a full dose of ergot (a teaspoonful of Squibb's fluid extract, in half a wine glass of water for example), just as the delivery of the child is taking place. The precautionary measures which should always be adopted to prevent post-partum hæmorrhage, are also, to a certain extent, a prophylactic against after-pains. Where they come on a few hours after delivery, they may sometimes be speedily relieved by again making firm pressure over the fundus of the uterus, which causes the expulsion of coagula. But this method of relief should only be tried a few hours after delivery, as the pressure may excite irritation resulting in inflammation. Some preparation of opium should then be given. A great variety of different formulas have been proposed for this purpose. My favorite prescription in these cases, is ten grains of the Tully's powder,* repeated, if necessary, in four or five hours; but in most cases, ten grains of Dover's powder, a teaspoonful of elixir paregoric or Dewees' camphor julep, will probably accomplish the result as well. Sometimes, a day or two after labor, severe after-pains are excited by the presence of flatus in the intestines. In these cases, the abdomen is tympanitic, and a slight touch causes severe pain, while the uterus cannot be felt. If the pressure be steadily increased the pain diminishes, until it entirely disappears. If now the hand be suddenly lifted up from the abdomen, the pain at once returns with great violence. If the pain, tympanitis, and tenderness on pressure, are due to inflammation of the peritoneum, the greater the pressure the greater the pain. The after-pains, due to flatus, are most speedily relieved by turpentine stupes and turpentine enema.

There are, also, some rare cases of after-pains which I have met with, which seem to be purely neuralgic in their character. There is no distension or tenderness of the abdomen, nor is the uterus enlarged. On the contrary, it

TULLY'S POWDER.*

℞. Pulv. G. Camphor. } ää ʒj.
Cretæ pp. }
Pulv. Ipecacuanh. }
Morphiæ Sulph. gr.j.
M.

is very firm, but very sensitive on pressure. There is an entire absence of other symptoms, such as febrile reaction, and constitutional disturbance, such as atteuds inflammation of the pelvic organs. These neuralgic pains do not seem to yield to opiates, in the fullest doses, but within a few years past I have treated them successfully by quinine, internally, and the application of chloroform liniment externally. I give two grains of quinine every fourth hour. The liniment is the following: ℞. Chloroform. ʒ j., Lin. Sapo. Co. ʒ vj. M. Wet a piece of flannel of double thickness, large enough to cover the whole uterine region, and lay upon the skin, immediately covering the patient with the bed-clothes. The application, for the first moment, causes a disagreeable sensation of cold, which is at onee succeeded by a burning but not ungrateful heat. A patient that I saw a few weeks since in consultation, had been suffering intense agony for over forty-eight hours, and in addition, she was suffering from the disagreeable effects of large doses of morphine that had been given her to relieve the pain and induce sleep. One dose of five grains of quinine with the application of the liniment I have just mentioned, gave her entire and permanent relief.

I should not omit to mention that, in some few cases, cramps in the legs seem to take the place of after-pains. I believe Drs. M'Clintock and Hardy were the first to call attention to this fact, which my own experience has verified in two or three instances. The cramps disappeared after the expulsion of coagula from the uterus.

The Lochia.—This is the term applied to the discharges which take place from the vulva from the time of delivery until puerperal convalescence is complete. The quantity, duration, and character of this discharge, vary greatly in different women, who are perfectly healthy. It is at first sanguineous, being principally the blood which oozes from the open mouths of the uterine veins. It then becomes of a greenish yellow, thick and oleaginous, and lastly, thin and serous. In the first twenty-four hours, the patient usually soils ten or twelve napkins. It generally is considerably less on the second day, and not unfrequently the discharge is temporarily suspended for a few hours, when the function of lactation is at first fully developed, a fact that you should remember, as nurses are sometimes alarmed by such an occurrence, and injudiciously excite the apprehension of the patients on this account. The duration of this discharge varies from a few days to four or five weeks. As a sanguineous discharge, it usually continues but a few days. If it be prolonged three or four weeks the probability is that it is due to some local lesion, as ulceration of the cervix, or some lacerations which have occurred during labor, and local exploration should be made to determine the exact character of the lesion. The suppression of the discharge at an early period after labor, is not to be regarded as an unfortunate symptom, except it be attended with other symptoms of an inflammatory nature. It usually ceases much earlier in those who are delivered of still-born children, where the fœtus has been dead some days previous to labor. Although there is a peculiar odor which ordinarily attends the discharge, yet, if it be particularly offensive, this condition merits attention. It indicates the putrefaction of coagula or some foreign substance in the uterus, and injections of chloride of soda should be directed to correct the odor. I generally direct that two tablespoonfuls of Labarraque's solution in half a pint of tepid water should be injected into the vagina twice a day. If the discharge has a coffee-ground color, with a fetid odor, it should lead to the suspicion of gangrenous inflammation of the uterus or vagina, and the above injections should be used several times a day. Sometimes the discharge becomes purulent. The source of this may be in the vagina, the cervix of the uterus, or the cavity of the uterus, and after the lochia have ceased, and the discharge has become a purulent leucorrhœa, an examination with the speculum should be made to determine its source. Otherwise, your patient may remain for a long time more or less an invalid, after her confinement, seriously compromising thereby your reputation.

Original Communications.

MEDICO-LEGAL POINTS IN A CASE OF SUSPECTED HOMICIDAL CUT THROAT,

AS PRESENTED AT A MEETING OF THE NEW YORK ACADEMY OF MEDICINE, HELD DEC. 18, 1861.

By A. CLARK, M.D.,

PROFESSOR OF PATHOLOGY AND PRACTICE OF MEDICINE IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

A woman is found in her bed of a morning with her throat cut, lying upon her back, a little inclined to the right; the head turned a little more in the same direction than the body. A considerable quantity of blood had flowed from the wound upon each side of the neck; most upon the right. She was lying on the left hand pillow near its right extremity. There was sprinkling of blood to a limited extent; some upon her face, in the curls of her hair; on the right hand pillow at a distance of about two feet from the wound, and on the left hand pillow at a distance of nine inches to a foot. The knot of the hair at the back of the head was saturated with blood, clots of considerable size were found along the right shoulder, and blood had flowed down to the hips and had entered the feather-bed, so as to saturate a considerable spot at this place, *i. e.* in the position of the hips, causing a sensation of weight to the hand placed under the bed, and moistening the hand with blood. The quantity of blood lost could not be accurately estimated, but the bed, after it had been exposed to the rain and weather for several weeks, still contained a coagulum with feathers which was compared in size to a duck; another coagulum was found in the feathers of the left hand pillow about the size of the fist. One or two clots, compared to the size of the two hands, were found upon the surface of the bed. A spot of blood about nine inches in length, and of less width, was observed upon the sheet turned down over the body near to the hips: and some spots of blood were noticed in the blankets under the sheet.

The right hand was lying by the side, the arm somewhat bent at the elbow, and the hand at a distance of about six inches from the hips. Under the wrist and hand was found a razor, partly open and partly covered with blood, more on the inside than on the backs of the fingers.

On the left hand a few spots of blood are described at the ends of the fingers. The curls, which had been put up for the night, were not ruffled or any way disturbed. There was no scratch or abrasion, ecchymosis, or other marks of violence upon the face, hands, or any part of the body, except the cut already referred to.

There were marks of bloody fingers on the face, described as if beginning on the left side, and drawn across the nose, but so vaguely described, that it could not be determined whether they were made by the right hand or by the left. Marks of bloody fingers were described on the inferior and left corner of the right hand pillow, and also on or about the middle or centre of the same pillow. When, however, the pillow tick, produced in court, was seen to be sprinkled with blood at about the same spot, a question was raised whether these latter marks were produced by sprinkling or by the hand. The woman had not removed her drawers or flannel petticoat, and the night dress was turned down from the neck. Little or no blood is described as seen on the chest below the upper edge of the flannel dress, which was under the night gown.

The cut in the neck was five inches and a half in its curved measure and three inches in its direct length. It began on the left side at a point nearly opposite the cricoid cartilage upon the sterno-cleido-mastoid muscle near its posterior border, passed directly inwards towards the centre of the neck and in the line of a radius from that centre to the depth of about three quarters of an inch; it then swept

over the fifth cervical vertebra, shaving off a small portion of the transverse process, passing over the body of the vertebra, penetrating its covering and making a slight impression upon the bone itself, and from that passing out in a direct line on the right sterno-cleido-mastoid muscle, cutting the inner portion of the muscle, and extending half an inch in the skin beyond the parts of the muscle cut—in other words passing outwards nearly in a direct lateral line. The left extremity of the incision was three and one quarter inches below the lobe of the ear, and the right extremity three and one half inches below the corresponding point on that side. The cut had severed the cricoid cartilage and all the muscles in its track, together with the deep jugular vein, the pneumo-gastric nerve, and the carotid artery on each side.

The bed was four feet and four inches in width, and stood in the corner of the room, so that the head of the bed was against the wall and the right side of the bed also against another wall. The room was about seven feet wide and nine feet long. In the space between the bed and the wall on the left side, at the head of the bed, was a stand about two feet and one half in length and eighteen to twenty-four inches wide, on which were found a tumbler, vials, and other furniture in order and undisturbed. The cut appeared to have been one incision.

Two important facts are yet to be stated. The right sleeve of the night gown, buttoned at the wrist, was bloody on the part looking towards the body. Between the wrist and elbow a part of the sleeve was "soaked" with blood, and near the elbow was a sprinkling by drops, which were elongated towards this joint. The other fact is this, while women were "laying out the body," one of them lifting the arm of the dead person, saw bloody froth or rather large blood bubbles rise from the trachea into the wound. Interested in this occurrence, she again lifted the arm with the same result.

A coroner's inquest was held, and the woman was buried under the verdict of suicide. Four months after this, on the 10th of April, 1860, under the suspicion of murder, her body was exhumed and a post-mortem examination made. The body was found in a good state of preservation. The lungs were reported as congested and engorged with blood. Bloody fluid was found in each pleuritic cavity, estimated at five ounces on the left side and eight on the right. The lungs were slightly adherent, otherwise they were healthy. The heart was empty and sound in every particular. The brain exhibited no appearance of any disease, but had undergone considerable change from decomposition. All the other organs examined were found healthy and free from blood. The stomach and intestines were reserved for chemical examination. The tongue opposite the molar teeth was found to be ecchymosed in a space on the left side about one inch in length and somewhat more than half an inch in width. On the right side was a similar spot of about one half that extent. In the right lung were several spots of pulmonary apoplexy.

A second post-mortem examination was made ten days after, or four months and ten days after death. The face, upper part of the chest, inferior portion of the inside of the thighs, upper portion of the legs, and back of the hands, were covered with white or bluish green mould spots; the skin underneath had become of parchment appearance, semi-transparent and reddish brown. The eyes were entirely shrunk and sunken, leaving deep cavities completely lined by the eyelids. There was slight cadaveric rigidity. The inferior half of the trunk, the lower portion of the legs, outside the thighs, the whole lumbar region, and upper portion of the pelvic region posteriorly, were free from any marks of decomposition, and entirely of natural appearance, except a slight uniform greenish stain; and all parts were free from static or post-mortem congestions, or blood stains. The cut in the neck was found as before described, passing nearly transversely from left to right, across the neck, inclined from above a little downwards. The muscles and tissues were so far changed by the previous examination and some drying as to render it impossible to distinguish precisely the vessels and nerves that had been divided. Opening the sutures of the cut previously made, the viscera of the abdomen, it was found, had been almost wholly removed; there remained, however, the uterus, bladder, and rectum in the pelvic cavity, and these it was noticed were unusually bloodless. In the thoracic cavity one lung remained, and this was lying in the right chest; it was the left lung, which had been turned over upon the heart. In the left pleuritic cavity, which was otherwise empty, was found a drachm and a half of bloody-looking fluid. In the right there was twice this quantity of a similar fluid, but thicker and of darker color. The left lung was entirely uninjured, its bronchus and its vessels being still uncut. It was greatly contracted, but presented no evidence of congestion, except in the inferior and posterior portion, where the blood usually accumulates after death; and this accumulation occupied a smaller space than is usual in the majority of persons who have died of diseases not affecting the lungs.

The organ was of a dark greenish color in its posterior portion, in other parts approaching a slate color; it was perfectly soft and natural in feel; it occupied one-fifth the thoracic cavity. Removed, it floated in water, weighed seven ounces, four drachms, and fifty-five grains (Avoir.). Immersed in water, it displaced eleven fluid ounces and no more; there were a few vesicles of emphysema in the inferior and anterior edges, resulting from commencing decomposition. The heart still attached to the aorta, had been opened; it was stained with fresh-looking blood in the upper part of the left ventricle, and had a spot of commencing decomposition on the inner surface at the apex. The veins of the heart were not distended, and contained very little blood and some air. The aorta, which had not been examined previously, was opened from the heart through its whole length, together with the continuous arteries down into the pelvic. In the upper part of the aorta there was just blood enough to cover the inner surface slightly, but not enough to flow, or show much coagulation. The lower half was entirely empty, and not blood-stained. No blood was found in the arteries or veins of the pelvis or of the abdomen, and no blood stains. The lung was easily and completely inflated, except a small portion of the inferior and posterior portion which had been the seat of post-mortem congestion; with the exceptions above stated, it appeared remarkably healthy. The bronchial tubes were opened as far as the scissors could penetrate; they were found of a reddish-hue, the inferior branches of deeper color than the superior, but containing no blood, or only a trace of blood. The specific gravity of this lung was found to be ·665.

Admitting that the quantity of bloody fluid found in the chest had drained from the lungs, it being upon this side by estimate five ounces, let this be added to the weight of the lung as before stated (*i. e.* seven ounces, four drachms, and fifty-five grains), and also the three drachms found at the last examination in the right cavity, its total weight must have fallen a little short of thirteen ounces. Hutchinson estimates the weight of the healthy female lungs, based upon six examinations of women, weighing on an average ninety-four pounds, as seventeen ounces for the left lung and nineteen for the right. This woman weighed ninety-six pounds, and it may be fair to infer that her lung might have weighed seventeen ounces, and yet not have been materially congested. As to the weight of the right lung, it is reported to have been nine ounces. If the quantity of fluid found in the right cavity on the first post-mortem examination was eight ounces, this added to the weight of the lung would give us seventeen ounces as the weight of the right lung, which will be two ounces less than Hutchinson's average for a woman of her size and age. There was no dispute in regard to the bloodless character of the organs that were removed from the body, with the exception of the lungs.

The husband of this woman was charged with having murdered her. The theory of the prosecution was that she

was first suffocated, and that her throat was cut afterwards.

EXTENT OF CUT.

It was urged that a cut of the extent here described could not be made by the woman herself upon her own throat, and it appears to be a general belief that such cuts are to be ascribed to homicide rather than suicide; still there are many facts on record that will authorize the belief that cuts of great extent can be made by persons attempting their own lives.

Among the cases illustrating this point stands prominently that recorded by Marc (*Annales d'Hygiène*, vol. iv. p. 407; *Taylor*, p. 265; *Beck*, vol. ii. p. 133), in which a young man standing before a window, with a razor, inflicted a wound two inches above the sternum, extending from the outside of one sterno-cleido-mastoid muscle to the outer border of the other, dividing everything, and slightly wounding the anterior ligaments of the vertebra. On this case the reporter remarks: "It is one of the remarkable instances, though occasionally observed heretofore, of the degree of energy to which the intention of suicide can be carried, with persons especially who terminate their own lives by cutting their throats. It proves, in truth, that it is wrong to deny the possibility of suicide in this manner for the reason that the incision has divided part after part, the larynx, the œsophagus, and has struck upon the cervical vertebræ."

Devergie reports in the same vol. page 414 (*Taylor*, 265) an enormous wound in the neck, two inches deep, going to the posterior layer of the pharynx next to the spinal column, three inches and three lines open and just one foot in circumference, cutting the bone of the jaw, submaxillary glands, all the muscles of the hyoid bone from the jaw and tongue; the tongue itself and the jugular veins. This great wound was made in three cuts. The man was seen to do this or "otherwise," says Devergie, "would not the suspicion of murder have been raised immediately, and would not the physician consulted have found in the wound circumstances which would militate much more in favor of homicide than suicide?"

Taylor (p. 264) quotes Dr. W. Burke Ryan's report of an extensive suicidal wound reaching to the cervical vertebræ, one of which had been cut by the razor.

Professor Dieffenbach (*Archives Générales de Médicine*, Oct. 3, p. 256), gives an account of thirty-one cases of cut throat, the subjects of surgical treatment. Of these the wound in one was "several inches long;" in another reported "very extensive, to the posterior wall of the œsophagus;" in a third, six inches in length; in a fourth to the cervical column. This latter was in a woman of sixty, and extended from one sterno-cleido-mastoid muscle to another, at a point just below the larynx.

Brière de Boismont, in examining the different kinds of suicide (*Annales d'Hygiène*, vol. xli. p. 143), searched the Procès-Verbaux relating to 4595 suicides. Of these, simple section of the neck numbered fifty-seven, section of the neck and other wounds, fourteen more, making seventy-one. Of this number, in twenty-eight cases, the details of which are sufficiently precise, the instrument had divided more or less completely the muscles, the vessels, arterial and venous, the pharynx and trachea, and was only arrested by the vertebral column. In several cases the wound, frightfully gaping, exposed to view all the wounded parts. Many of these large wounds had been made by a single cut.

On this point, we may cite Taylor (p. 265) in the following words: "As to the extent of the cut, *i. e.* the number and importance of parts injured, it has been hastily laid down that an extensive wound of the throat involving all the soft parts to the vertebral column could not be inflicted by a suicide; * * * * but occasionally all are divided to the vertebra. There are cases perhaps in which with a firm hand there is a determined purpose of self-destruction."

Briand and Chaudé (p. 262), quoting these and similar cases, state that wounds, the most extensive and the most multiplied, may be suicidal. Similar citations might be multiplied, but these must be sufficient. It may be worth while to refer to a few other cases which, though not parallel to the one which we are considering, still show great energy in the attempt at self-destruction. Such is the case reported by Degranges (*Annales d'Hygiène*, vol. xiv. p. 410; *Taylor*, p. 787), in which a young man inflicted a wound to the vertebral column about six inches long, not cutting the deep jugulars or the carotids, but severing the thyroid arteries, bled as was believed to fainting, staunched the blood with his handkerchief, went up stairs, found a cord, descended, placed a ladder against the wall, adjusted the cord to a nail, and afterwards hanged himself.

Dr. T. C. Finnell (*Trans. State Med. Soc., N. Y.*, 1861, p. 61), one of our own fellows, reports the case of a shoemaker, who stabbed himself in the neck with his knife with such energy as to pierce the fifth cervical vertebra to the depth of one inch, breaking the knife outside the bone.

Mr. Jameson's case (*Beck*, vol. ii. p. 130) is extraordinary. A woman cut out part of her larynx, *i. e.* the cricoid cartilage entire, the left wing of the thyroid, the right arytenoid, and part of the upper rings of the trachea, and a portion of the muscles attached, and while the surgeon was dressing her wounds, took these parts from her pocket and exhibited them to him.

Taylor (p. 269) notices the case of a lady who made two very deep extensive cuts in the neck, dividing the principal bloodvessels on the right side, using as her weapons two pen-knives. The wounds were fatal.

Leuret (*Annales d'Hygiène*, v. 236) reports that an officer cut his throat with a small scissors used for embroidery, dividing the trachea and right carotid completely, the œsophagus and left jugular vein partly, the wound being about two and a half inches in length.

Dr. Spittal (*Edin. and London Monthly Jour. of Science*, July, '41) gives the case of a woman confined for theft, who during the night had symptoms of delirium tremens, but was rational in the morning, so that the matron going to church, gave her the bible, desiring her to read the first Psalm. She was also furnished with milk in an earthen jug and a spoon. The matron on returning from church found her dead, the floor covered with blood, and her neck horribly cut. The wounds had been inflicted by the fragments of the earthen jug which she had broken, and had been bored and deepened by the handle of the spoon.

(To be continued.)

LITHOTOMY IN CHILDREN.

By CHARLES K. BRIDDON, M.D.,

SURGEON TO THE NEW YORK DISPENSARY.

According to the views commonly taken, calculus is much more incident to early years than to any other period, and the disease is especially frequent under the age of puberty in ill-nourished children. Calculi have been found in the bladder at birth, and patients are frequently presented to the surgeon in whom the symptoms have been noticed from the earliest periods of life. Out of 5376 cases mentioned by Civiale, 2416 were children. Mr. Coulson has drawn up two tables for the purpose of determining, in a more precise manner than has hitherto been done, the relative frequency of calculus at different ages. From one table, including only cases submitted to operation, it would appear that seventy-one per cent. were under twenty-one years. From another table it was ascertained that fifty-five and a half per cent. of calculous patients were under twenty-one. This class of patients are also amenable to the same laws which influence adults, being more subject to the disease in certain districts than others. Dr. Gross, in "A Practical Treatise on the Diseases and Injuries of the Uri-

nary Bladder, etc.," states that, in the United States, a larger number of children are affected with stone in the bladder, in Kentucky, Ohio, Tennessee, and Alabama, than in any other region; the inhabitants of Missouri, Iowa, Wisconsin, Michigan, Indiana, New York, and New Jersey, being comparatively exempt. That local causes do influence the prevalence of the disorder is an ascertained fact, but why they should prevail in some districts, more than in others, remains still unexplained. In some of the following cases, complications arose illustrating accidents of not infrequent occurrence, in one of secondary hæmorrhage, in another the impaction of a urethral calculus.

Case I.—Michael O'Connor, æt. 14, of Irish parentage, born in Albany, was presented at the New York Dispensary on the 20th of June, 1859, suffering with symptoms of vesical calculus. When between six and seven, had an attack of hooping-cough, followed by measles. Soon after this, he began to suffer from irritation about the bladder, was treated for the gravel, but never had an instrument introduced into that viscus; was emaciated and careworn in appearance, he walked with a peculiar gait, as if he wished to carry his pelvis steady, and said that running increased his pains, which were seated in the small of the back, hypogastrium, and glans penis; he occasionally assumed various positions to evacuate his bladder, and the stream was sometimes bloody. On introducing a No. 8 sound, a calculus was detected; his urine exhibited a trace of albumen, acid in its reaction, sp. gr. 1018. After standing twenty-four hours a drop, placed under the microscope, exhibited a very few pus corpuscles, some blood discs, bladder epithelium, and a solitary crystal of oxalate of lime.

His parents were informed of the nature of his ailment, and of the means necessary to relieve him. They gave their consent, and after some preparatory treatment, the lateral operation was performed upon him on the 5th of July, in the presence of Drs. Gurdon Buck, Aigner, Quimby, and Weir. Nothing unusual occurred during the steps of the operation, two calculi were removed, no tube was introduced into, and no dressing was applied to the wound. The patient was directed to take a full dose of henbane, and mucilaginous drinks. The largest calculus weighed two drachms, the smaller one, eighty-seven grains; they were of a dark brown color, with finely crystalline surfaces, a section presented aggregation of particles in a concentric arrangement around a still darker nucleus. A portion of the dust obtained in making the section, was digested with nitric acid, and, on being submitted to slow evaporation, left a scarlet residue, which, on the addition of ammonia, yielded the beautiful purple, or lake color, dependent on the formation of muroxid. A second portion was dissolved in liq. potassæ, the solution was treated with excess of acetic acid, and, on allowing a drop of this to evaporate on a glass slide, well formed crystals of uric acid were deposited.

6th.—The patient slept a few hours before morning, his pulse is 120, but with this exception, the symptoms are all favorable; he has passed about four ounces of urine through the urethra, and very little by the perineal opening. Ordered hyosciamus, alkalies. 7th.—Pulse 120, soft and compressible, skin hot and dry, tongue clean and moist, urine passes more freely behind, but a little also by the urethra, had an alvine evacuation in the night that gave him some pain. 8th.—Pulse 100, urine passes freely from both passages; the greatest complaint is of hunger, which is appeased by a light unstimulating diet. 9th.—Pulse 88, skin cool, urine passed principally behind. 10th.—Pulse 80, general condition good. After this date the case went on favorably, without a bad symptom; on the 14th, he passed nearly all his urine by the urethra; two days later, none escaped the perineal wound, which was nearly cicatrized. The boy was about before it was completely closed, but this rather hastened than retarded the processes of cicatrization, which were complete by the end of the third week.

Case II.—Thomas Cunningham, æt. 3 years and 9 months, native of New York, but of Irish parentage, was brought to the Dispensary about the beginning of September, 1859, suffering with symptoms of stone in the bladder. In infancy, during the first dental eruption, the patient was prostrated by an exhausting diarrhœa; soon afterwards, when about twenty months old, first began to exhibit symptoms of vesical irritation, tenesmus, dysuria, and frequent micturition, at first slight, and attracting but little attention; they continued with augmenting severity and occasional remissions, until medical aid was sought. He had also acquired a habit of pulling on the integuments of the scrotum. During all this period he ran about bareleggedin the streets, equalling if not surpassing his playmates in all the rough and tumble exercises of early youth. His sufferings appeared to be the most severe, or perhaps it would be more correct to say, that they attracted more attention, at night. At the age of three years he contracted measles, on recovering from which he went rapidly through an attack of hooping-cough. Patient when first seen Sep. 12 did not appear to have suffered much from local or constitutional causes, and was apparently in rude health, with all his functions unembarrassed save those of the bladder. A No. 6 sound was introduced, and nothing being detected his mother was directed to return with him in a few days. Sept. 16th.—He was placed under the influence of ether, a sound was placed in the bladder, which was fully distended with urine, and a calculus was easily detected, the click being audible to several students who were present.

Oct. 6th.—Kindly assisted by Dr. Jno. O. Stone, in the presence of Drs. Aigner and Corson, I performed the lateral operation, and removed two small calculi. Some little difficulty was encountered in introducing the finger into the bladder, the neck of which, situated high up, was disposed to recede from the finger, which could not readily engage in it. This was surmounted by introducing a stout probe along the groove in the staff into the bladder, and then carrying the finger between the probe and the convexity of the staff; there was not much hæmorrhage during the operation, not a single vessel jetted, and what blood was lost was by general oozing from the incised surfaces.

7 P.M.—Patient in good condition, urine has passed freely by the wound, for the first few hours it was considerably colored by admixture with blood, but is becoming clear; pulse 120, skin warm, complains only of pain when the urine passes. Ordered hyosciamus with pot. bicarb., diluents and ice. 7th, 10 A.M.—Has slept well through the night, urine has passed freely from the perineum, and is barely tinged with blood. 1 P.M.—Had slight hæmorrhage, with discharge of some small coagula from the wound. I hoped that this was nothing more than might be associated with reaction then fairly established, and directed cloths, wet with ice water, to be applied. I visited again at 7 P.M. and found that the hæmorrhage, which commenced at 1 P.M., had ceased. At 6½ the child appeared to be distressed with pain, tossed about the bed, and at last passed some coagula from the wound, which were followed by pretty free hæmorrhage. I opened and exposed the wound freely, but could detect no bleeding orifice; the discharge appeared to come from the neighborhood of the bulb. Having determined to tampon the wound, I shaped a piece of compressed sponge, which had been saturated with tannin, into the form of a cone, of proper form, and large enough when expanded by the absorption of moisture, to adapt itself to the wound; I perforated this in its long axis, and traversed it with a portion of silver canula two inches longer than the cone, one inch of the eyed extremity of the tube projecting beyond the apex of the same. Having prepared the tampon, I introduced the index finger of the left hand freely into the bladder, and on withdrawing it lodged the plug safely in situ. This effectually arrested all bleeding, but the little patient was already much exhausted by the loss he had sustained; he was blanched, restless, and faint, with a pulse of 140; some mild restoratives were prescribed, and beef tea in addition to his previous farinaceous allowance. 8th.—Patient has rallied from the constitutional shock, the tampon has proved

effectual, no hæmorrhage, other than sufficient to saturate the bandage which confines the canula in position; the urine distils through the same channel, and the child expresses no inconvenience from the presence of the plug. 9th.—Condition as yesterday, no bleeding, urine escaping freely, pulse 120. 10th.—No bleeding, pulse as before, no complaint of pain, takes his drinks well, and looks altogether better; there is some slight inflammatory œdema of the scrotum, and the plug bulges a little, as if forced outwards from its bed, by swelling of the parts in which it is inserted. 11th.—Patient looks bright and cheerful, has spent a comfortable night, and has taken his food better this morning, has also had an evacuation from the bowels; there is a little discharge of pus around the plug, which is protruding from the wound; T bandage was removed, parts cleaned, and orders given to discontinue medicine. At 1 P.M., the plug escaped, and was not followed by hæmorrhage. From the last date to the 16th, everything progressed favorably, when the boy passed the contents of the bladder through the urethra, the greater portion finding its exit by the perineum, the wound in which, however, gradually closed, and was completely cicatrized by the end of the sixth week.

Case III.—As no points of interest occurred in the next case, I shall pass it over as much condensed as possible. John Downey, æt. 6 years, was brought to the Dispensary by his mother, on the 24th of October, 1861. She stated that he had suffered in urinating for the past two years, that he had been under the care of several medical gentlemen; some had recommended removal of the prepuce which was elongated by pulling, others had medicated, but none had sounded the bladder. He was in very good condition, but latterly had suffered more than usual. On the morning he was presented, I introduced a sound without etherization and of course heard nothing but the little fellow's cries, and felt nothing but his resistance. 28th.—Boy in a good condition of anæsthesia, the sound elicited a ring from the stone, plainly heard by the mother and bystanders. 30th.—I performed the lateral operation, assisted by Drs. Buck, Aigner, and Badger. Nothing worthy of note occurred during the operation. A rough tuberculated calculus was removed weighing 126 grs.; it was yellowish brown in color, and ovoid in shape; its nucleus, composed of uric acid, was surrounded by urate of ammonia, arranged at first in laminæ but nearer the surface irregularly. I think, but am not certain, that oxalate of lime entered into the composition of some of the large tubercula met with on the surface. The boy's recovery was uninterrupted; the first two days the urine flowed from the wound, then principally by the urethra for five or six days, when it again passed by the perineum, but gradually resumed its natural channel, and after the second week he was out of doors.

Case IV.—November 17th, 1861, I was called to visit William Collins, native of New York, æt. 2 years and 7 months, who was suffering severely with symptoms of a foreign body in the bladder. No one in the boy's family had been known to be affected with stone. He enjoyed good health until ten months before, when he began to have difficulty in urinating; would scream during that process, pull on his prepuce, which had become elongated in consequence. During these violent straining efforts, he once or twice prolapsed his rectum; his sufferings became more severe six months ago, the attacks would occur every two weeks, lasting three days and followed by an interval of comparative ease, during which he played about in apparent good health. At the time he was first seen by me he was in one of his paroxysms; flushed in the face, which is expressive of suffering; he kneels with his hands grasped over the pubes crying with pain, and looking piteously towards his mother for that help which she could not afford. He was a well developed child, and his affliction did not appear, as yet, to have affected his health or nutrition. I ordered full doses of henbane with bicarbonate of potassa, informed the parents of my suspicions regarding the presence of stone, and proposed to examine the bladder under the influence of ether on the following day. 18th.—On visiting the boy this morning, I found the penis enlarged to twice its normal dimensions by œdematous infiltration, which extended as far as the root of the organ. The scrotum was free from swelling, and I suspected that of the penis to be caused by the presence of a calculus impacted in the urethra. My suspicions were corroborated by a statement of the mother, that he had not passed water during the preceding ten hours, though he had made frequent attempts to do so. After etherizing the patient, I divided the prepuce, and introducing a sound felt it grate against a foreign body before entering the bladder, and on entering that viscus I readily detected a stone. Ordered an enema containing three drops of tr. opii at once, and to be repeated if necessary. I consulted Dr. Buck as to the propriety of an immediate operation, which he advised for the following day. The patient was ordered a dose of oil at bedtime and an enema the following morning.

19th.—In the presence of Drs. Buck, Aigner, Kelly, and Badger, I extended the incision in the prepuce, exposing the glans freely, and also bringing into view a calculus emerging from the meatus urethræ. This was easily extracted; it was elongated, ovoid, about the size of a large grain of barley, and composed of ammoniaco-magnesian phosphate. After the removal of this, the sound was carried into the bladder, which expelled its contents along the side of the instrument, in spite of an effort made to resist it by pressure exercised with the finger and thumb. A calculus was detected, and the lateral operation was proceeded with. No difficulty was met with until after the urethra was opened, when, on introducing the finger into the bladder, the neck receding slipped over the point of the staff, and the finger passed into the recto-vesical cellular space; this, however, was remedied, the opening into the bladder was found, and a calculus removed without further trouble. The calculus weighed sixty grains, a flattened ovoid in shape, and composed of uric acid with a very small nucleus of am. magn phosph.; the inner layers around the nucleus were arranged concentrically in regular laminæ, the remainder was formed without order, and the surface was granular.

9 P.M.—In good condition, reaction moderate, urine has passed freely by the wound, and is but slightly tinged with blood.

20th, 12 M.—The patient had a convulsion this morning, which was followed by a copious evacuation from the bowels. The attendants assert that it was a regular convulsion of the muscles of the extremities and face, and that it lasted fifteen minutes. It was probably occasioned by the distension of the rectum, as it subsided when that was emptied; and the child appears now quite relieved and in good condition. Urine passes freely by the wound, œdema of the prepuce is fast diminishing; prescribed an anodyne enema. 9 P.M.—Appearance good, skin moderately warm and moist, has had no more convulsions, but vomits whatever is taken; urine passes freely behiud, and is scarcely tinged with blood. Ordered liq. calcis ℥j., hora quaque sumend; pellets of ice and milk diluted with barley water.

21st.—Vomiting has abated, but there have been many ill-conditioned dejections of a green and slimy character. Ordered syr. gum. acaciæ. 8 P.M.—Vomiting has ceased entirely, but the bowels have acted three times since morning. The margins of the divided prepuce are cicatrizing, and the œdema has almost disappeared.

22d.—Much improved in every respect, calls loudly for food, bowels quiet, urine passing by perineum; mother is not able to inform me whether any passes by the urethra or not. After this date, nothing occurred worthy of note, other than the non-appearance of the urine by the natural outlet; there was some superficial sloughing of that portion of the meatus which had embraced the smaller calculus, and whether it was concerned in the delay or not, I am not able to decide. By the 28th, the slough had cleared off, leaving a healthy granulating surface, and I passed a sound through the urethra into the bladder, hoping, by such means, to invite the stream. 29th.—No urine has passed by the

urethra; I again introduced the sound. 30th.—In passing the sound to-day, a full stream of urine passed through the canal alongside the instrument. After last date, he passed all his urine through the urethra, and the perineal wound speedily cicatrized.

In the second of these cases hæmorrhage occurred, and I presume it was caused by the division of some anomalous branch supplying the bulb, which portion of the urethra usually receives its vascular supply by a vessel given off from the pudic opposite the opening in the triangular ligament, and the course of such vessel is out of the way of the deep incision. Erichsen says, that in children the perineum is usually proportionately more vascular in consequence of the irritation and straining, but I did not observe that such was the condition in the other cases. It is interesting to note that the means used to suppress the hæmorrhage proved trustworthy; and under similar circumstances I should resort to it again.

In the fourth case, the operation was complicated by an accident that I think must frequently occur in children. In these subjects, the bladder lies high, the parts are mobile and apt to recede before the finger, pressing its way onwards towards the organ; under such circumstances, the neck of that viscus may be easily pushed over the end of the staff, leaving the operator without a guide. I think this may be obviated by the surgeon taking the staff in his left hand at this point, depressing its handle so as to maintain its point fairly within the bladder during the introduction of the right index finger through the prostatic portion of the urethra.

The convulsions occurring, in this case also, the day after the operation, were, no doubt, caused by distension of the rectum; the peripheral distribution of nerves supplying this portion of the intestinal tube were in a condition of exalted sensibility; the additional stimulus of distension was conveyed along them to the cerebro-spinal axis, and thence reflected by motor branches to the muscular system. At all events such were my reasons for prescribing the introduction of an anodyne into the emptied gut, and the result justified the means.

A CASE OF

COMPOUND DISLOCATION OF THE TIBIA AT THE ANKLE-JOINT,

WITH COMPOUND COMMINUTED FRACTURE AND DISLOCATION OF THE FIBULA.

By S. L. WISWELL, M.D.,

OF CABOT, VERMONT.

Mr. J. W., æt. 53, on the 19th of June, 1861, after falling from a frame a distance of ten or twelve feet, was struck with a heavy piece of timber on the right leg a short distance above the ankle. On examination of the injured parts shortly after, the articulating surface of the tibia was found driven through an opening four and three-quarter inches in length; the fibula fractured at the distance of four inches above the joint, also again at the distance of one inch above, and the tissue between the points of fracture so injured, that sloughing resulted a few days subsequently, leaving a wound three and three-quarter inches in length, and some three inches in width. The principal arteries escaped injury. I decided to save the foot if possible, and having reduced the dislocation and placed the limb in its proper position, I prepared myself to combat the constitutional disturbances that I knew must arise. The case was watched with no little anxiety, and remedies administered accordingly. For the first ten days the pulse was kept below 100 by the judicious use of veratrum viride. Patient was slightly delirious at times for the first two weeks. Yeast and charcoal poultices were freely used until all danger of mortification was passed, and creasote was added to the poultices so long as any antiseptic was deemed necessary. As may be supposed, the discharge of pus and purulent synovia was abundant; to guard against the bad effects of which, bark and wine were liberally administered. The hypophosphites of lime and soda were also given, with the apparent effect of increasing the appetite.

The various mechanical contrivances made use of to contribute to the patient's comfort and keep the foot in place, were by no means peculiar, and consequently need not be described. After three weeks, he was in a fit condition to be removed to his home, a considerable distance; the limb being carefully bandaged and supported. During the six months that have elapsed since the injury, several small pieces of bone have been removed, and from the present appearance of the limb I feel justified in predicting a good limb. Of course amputation, if it had resulted favorably, would have saved much time; but I imagine that no surgeon, in these good days of conservatism, would be willing to say that I purchased the limb at too dear a cost.

January 9, 1862.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, November 20, 1861.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. FORDYCE BARKER'S PAPER ON THE USE OF ANÆSTHETICS IN MIDWIFERY.

Dr. Detmold.—It may appear presumptuous for me with an obstetric practice so limited, to rise in the presence of so many professed obstetricians, and give my experience; yet it has been my lot to use anæsthetics a great deal in obstetric operations. I have always used chloroform. As to the preference of chloroform over ether, I am not prepared to speak. I have always given chloroform, and should perhaps again give chloroform, although in surgical cases of late I have limited myself to ether. I am not an obstetrician, I see very few cases now, perhaps none, of ordinary labor, and it is only now and then that I am called in to a difficult case to perform an operation. I consider in these cases that the chloroform is preferable, because it acts more rapidly. Giving then my unqualified opinion in relation to all obstetric operations, I would not like to be without chloroform. I must, however, plead guilty that I cannot bring my mind to the general administration of anæsthetics in all cases of natural labor. I cannot give, I must say, any good reason for it, further than that I am unwilling to administer so powerful an agent about the effect of which there is in my mind some little obscurity. It is certainly a very powerful agent by which we can do away with consciousness, and with locomotion, by acting upon all the central vital organs. There is something fearful in the contemplation of its effects, and this fear is added to by the large number of deaths which have been occasioned by its use in surgical practice. I must confess that I do not see a cause for the use of such an agent in ordinary cases of confinement. Our mothers before us have been confined, and I believe that the statistics are not greatly improved by the new practice that has been recommended. I have no very good reasons why I should not like to see it generally used, but it gives me an impression that the institution of such a routine practice would lead to mischief. I would like to inquire here whether in protracted cases of confinement, in which chloroform or ether is administered, the child is not brought in some degree under the influence of the anæsthetic. I would like to know if the blood from the navel cord in such cases has the odor of the anæsthetic.

Dr. Worster was willing to endorse all the sentiments of Dr. Barker's paper save those which had reference to the increased danger of rupture of the perineum when anæsthetics were used. He had used chloroform in 95 per

cent. of all his obstetric cases, and had never met with one case but that would tend to prove the opposite opinion. He thought that the dilatability of the perincum was, under such circumstances, fully equal to the dilatability of the os uteri. As regards any danger to life, he had not met with the first case in his practice since the introduction of the anæsthetic.

Dr. Barker rose to correct the impression under which Dr. Detmold was laboring. The idea intended to be conveyed in the paper was that chloroform might be used in cases of natural labor attended with very *severe* pain.

Dr. Peaslee, in answer to the question propounded by Dr. Detmold as to whether the child was affected by the protracted use of the anæsthetic during the confinement of the mother, stated that according to his experience, where ether had been given for a longer period than twelve consecutive hours, he had detected the odor of the anæsthetic in the breath of the child for two days after. No bad effects, however, followed. Whether the same was the case when chloroform was used, he was unable to say. He thought, however, it would be a very important point to decide in summing up the respective merits of the two agents.

Dr. Detmold wished to ask if the purity of the chloroform had anything to do in preventing bad consequences. He was under the impression that the greatest number of accidents followed the use of the purest article.

Dr. P. Van Buren alluded to a paper which he had presented some years since on the same subject, in which the same conclusions were arrived at as by Dr. Barker. My own experience, continued he, has not been large in anæsthetics, though I have used them to a considerable extent in obstetric practice, and in every case it has been with the happiest results. I have had occasion to use it in several cases of difficult operations in which a vast amount of suffering was prevented. I have not seen the first case where the least possible injury has been done to the mother or child. In regard to the quality of the article as to its injurious effects when used, I believe it can be pretty well established that the purer the chloroform, the safer the administration. It is probable that no living person has given it oftener than Professor Simpson, of Edinburgh, and only one death is recorded where Duncan and Flockart's chloroform was used. In the paper to which I alluded, which was read before the Academy, a very critical examination was made of the different specimens, when it was found that those manufactured by Duncan and Flockart, and Squibb, were the only two that were perfectly pure. In conclusion he moved that Dr. Geo. T. Elliot be appointed to open the discussion upon the subject at the next meeting.

Dr. F. V. White asked the question whether the administration of the article was admissible in cases of organic disease of the heart, lungs, or kidneys.

Dr. Elliot stated that he could save a good deal of the time kindly allotted to him at the opening of the next meeting by giving his own views in relation to the question propounded by Dr. White. For a long time he held and taught that in cardiac disease complicating labor it was advisable to keep the patient under the moderate use of chloroform, in order to save her those violent straining efforts that accompanied the sensation of pain and distress. While his views had undergone no change in respect to the propriety of the exhibition of anæsthetics for the purpose of controlling such violent efforts of the will, he had thus far changed that in the event of such a complication occurring, he would prefer to give ether. The only reason for such a preference was that in case death should take place, as was very likely to happen, he desired to have the approbation of the profession in regard to the propriety of selecting ether. He could not illustrate better the opinion that he held in reference to this point than by adverting to a recent case in which the wife of a well known gentleman of this city was the patient. Notwithstanding the soft parts were in a good condition, the pelvis ample, and the patient in appearance the type of a healthy young primipara, the labor was absolutely powerless. He administered without effect ℥ iss. of Squibb's fluid ext. of ergot, as also ʒ vj. of Neergaard's tincture. As was always his custom in such cases, he did not leave the patient for any great length of time, keeping strict watch over the pulsations of the fœtal heart. Two hours having elapsed without any advance being made, a consultation was called at his request, and he had the pleasure of meeting Dr. T. G. Thomas. The condition of things was recognised, and the propriety of terminating labor artificially received his assent, and also that of the husband. As was always the custom with Dr. Elliot previous to the administration of chloroform, the heart was made the subject of examination, and Dr. Thomas proceeding to make that examination, recognised at once mitral regurgitation—a valvular bruit with the first sound of the heart, heard most distinctly over the apex. Dr. Elliot was also able to appreciate this condition of things. It was due to rheumatism which she had suffered from some time before, although at that time the disease was carefully observed by a distinguished physician of this city, who was unable to detect any cardiac complication. In accordance with his unfailing custom in these cases, Dr. Elliot decided, in the first place, to put his patient out of pain during the operation; in the second place, to spare her the anticipation of that operation; and in the third place, to prevent her living over in memory the steps of the operation. The anæsthetic was administered without making known to her the fact that forceps were to be used. Ether was preferred in this case, for reasons already stated. Dr. Thomas brought the patient under the influence of the anæsthetic, easily, pleasantly, and thoroughly. She knew of nothing whatever from the commencement of the administration until the binder was on, and the baby dressed and placed by her side prepared for her to receive it.

In regard to the question of danger in diseases of the kidney, he could best answer the question by referring to the concurrent testimony of the profession in regard to the value of the administration of anæsthetics in uræmic convulsions.

The Academy then adjourned, it being agreed that the subject for discussion be continued to the next meeting.

SURGICAL SECTION.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, Dec. 27, 1861.

DR. JAMES R. WOOD, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. GEORGE K. SMITH'S PAPER ON THE RELATION OF THE INSERTION OF THE CAPSULAR LIGAMENT OF THE HIP-JOINT TO INTRA-CAPSULAR FRACTURE.

(*Continued from page* 406.)

Dr. A. C. Post remarked as follows:—"I appreciate highly the laborious and scientific investigations, the results of which Dr. Smith has presented to the Section. I believe that they will lead to important modifications of the views which have been entertained by surgeons with reference to the important class of injuries to which they relate. But I am not prepared without further demonstration to assent to all the conclusions at which he has arrived. I have no objection to make to either of the first four propositions as stated by Dr. Smith. The fifth proposition seems to me to be founded on an error, or at least on a statement which has not been demonstrated to be a fact. The statement to which I allude is this, viz. that, when the cervix femoris has been fractured, and the fragments have reunited, and the cervix is found on post-mortem examination to be shorter than that of the opposite side, the absorption, to which this shortening is due, preceded the union of the fragments. It appears to me more probable that the union, in such cases, takes place in the first instance, and that the interstitial absorption is a subsequent event. This view would seem to be supported by the fact that before union has taken place, the fragment connected

with the head of the bone has a very imperfect supply of the veins or lymphatics through whose agency the absorption would be likely to occur.

In order to demonstrate the truth of Dr. Smith's proposition, it would be necessary to present a series of preparations taken from patients who had survived intra-capsular fractures for variable but known periods, antecedent to union, and to show that there was a progressive shortening of the neck before the occurrence of union. Dr. Smith's sixth proposition seems to me to involve errors, or at least unsustained hypotheses, more glaring than that which is objected to in the fifth proposition. The language which is employed by Dr. Smith in the sixth proposition seems to convey the idea that the main obstacle to bony union in intra-capsular fracture is to be found in the condition of the fragment connected with the shaft of the bone, and that when the portion of the neck between the fracture and the shaft has been absorbed, the obstacle to bony union is thus removed. Now I conceive the principal obstacles to bony union in intra-capsular fractures to be found in the condition of the fragment connected with the head, which having no supply of blood-vessels except those which are conveyed to it by the ligamentum teres, does not receive sufficient nourishment to secure its union by bone with the other fragment. The seventh proposition seems to be founded on the same errors or unsustained hypotheses which are contained in the fifth and sixth. The first sentence in this proposition requires to be qualified by confining the statement to intra-capsular fractures, as it has not been demonstrated that there is ordinarily any shortening of the cervix femoris following extra-capsular fractures. The eighth proposition is founded on the same error or unsustained hypothesis as the three preceding ones, viz. that the shortening of the neck by absorption precedes the union of the fragments by bony or fibrous tissue. From the similarity in the appearances of certain cases of fractured cervix in which union has taken place, and in which a large portion of the cervix has been absorbed, to certain cases of disease in which shortening has occurred without fracture, it might be inferred that probably the union of the fragments has preceded the absorption of the cervix.

The principal interest which attaches to Dr. Smith's report appears to me to be the demonstration that there is a considerable diversity in the extent of the portion of the cervix femoris which is included within the capsule in different subjects, and that the portions included within the capsules are equal on the two sides of the same subject. He has also demonstrated that there is a considerable portion of the cervix intervening between the insertion of the capsule and the inter-trochanteric lines. From these facts which have thus been demonstrated, it may fairly be inferred that it will ordinarily be impossible to determine during life, whether or not fracture is entirely within the capsule. And in old cases where absorption has taken place, and the capsule has shifted its position, it may be impossible, even by a post-mortem examination, to determine positively whether the fracture was originally within the capsule.

I propose, therefore, to make a new classification of fractures of the cervix femoris, dividing them into two classes, viz. fractures between the caput femoris and the inter-trochanteric lines, and fractures at the inter-trochanteric lines extending more or less into the shaft of the bone. I propose to call the fractures of the first class *intra-cervical*, and those of the second class *extra-cervical*. I think that these two classes of fractures will be found to correspond very nearly with those which have hitherto been described as intra-capsular and extra-capsular. They are somewhat distinct in the signs by which they are characterized during life, and are strikingly dissimilar in their appearances, as disclosed by examination after death. I submit the following propositions :—

1st. Intra-cervical fractures are usually included within the capsular ligament, being near the heart of the bone, and often involving a portion of it.

2d. Intra-cervical fractures are attended with a shortening of the limb, which, in recent cases, rarely, if ever, exceeds an inch.

3d. In intra-cervical fractures, bony union very rarely occurs. When bony union fails, there is sometimes ligamentous union, and sometimes the fragments remain entirely detached from each other.

4th. In intra-cervical fractures, whether bony union takes place or not, the cervix femoris becomes greatly shortened by interstitial absorption, and, after the lapse of several weeks or months, the limb may be shortened to the extent of two inches or more.

5th. In intra-cervical fractures, as the neck of the bone is shortened by absorption, the capsule shifts its position, so that in some cases it ultimately becomes attached to the shaft of the bone.

6th. In extra-cervical fractures, the cervix femoris is driven into the spongy structure at the junction of the trochanters with the shaft of the bone; and if the fracture be the result of a moderate amount of force, the upper fragment will be impacted into the lower. The shortening in such cases varies, according to Robert W. Smith, from a quarter of an inch to an inch and a half.

7th. When an extra-cervical fracture is produced by a greater amount of force, the impaction is relieved by the splitting off of the trochanters, and the fragments acquire a considerable degree of mobility. In such cases, the shortening varies from one inch to two and a half inches.

8th. In extra-cervical fractures, bony union may generally be expected, if the patient be not infirm, or of very advanced age. The union of the trochanters with the shaft of the bone takes place at an earlier period than the union of the neck with the shaft. An exuberant growth of bony matter is apt to take place at the junction of the trochanter with the shaft of the bone.

9th. There is not usually any remarkable shortening of the cervix femoris after extra-cervical fractures.

The Society then on motion adjourned.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

ON LOOSE CARTILAGES IN THE KNEE-JOINT.

The *Lond. Med. Rev.* for October, contains an article by Mr. Joseph Square, surgeon, etc., on the removal of loose cartilages from the knee-joint by Mr. Syme's subcutaneous operation. He first refers to a case reported in the *Lancet*, under the care of Mr. Fergusson, who operated by a valvular incision, in preference to the operation by Mr. Syme. In this case, synovia flowed from the wound during the operation, and the joint was subsequently attacked by acute inflammation, and discharged synovial fluid and pus for many days. After being actively treated with calomel, opium, and leeches, the patient finally recovered with a stiff joint. Having witnessed similar disasters follow this operation, the writer was ready to hail with satisfaction Mr. Syme's announcement of his operation, and commenced early to practise it with marked success. He now reports nine cases treated by himself and colleague, Mr. Whipple, in which they invariably employed the subcutaneous method, all of which have been attended with the most happy results. The operation consists in fixing the cartilage firmly at either side or angle of the joint, and while it is held in situ by an assistant, the skin is punctured by a long tenotomy knife, about two inches from the cartilage, and by a semi-circular sweep the areolar tissue is separated from the subjacent fascia, and the synovial membrane upon the cartilage freely divided. The cartilage is now pressed through the opening in the synovial membrane, and slid along the subcutaneous tract, and there fixed with a pad of lint, adhesive plaster, and bandage, a straight splint applied along the back of the limb, the limb placed at an angle of forty-five degrees, and generally a cold water dressing applied. At a proper time the cartilage is excised,

and the remaining portion of the wound heals without difficulty. In the treatment of these nine cases, the knee-joint was opened by subcutaneous incision thirteen times, and "neither pain, inflammatory action, nor any serious symptom has in any one instance arisen." The writer considers it a safe operation, and urges, with earnestness, its adoption by the profession as a common justice to humanity.

American Medical Times.

SATURDAY, JANUARY 25, 1862.

MEDICAL PROVISION ON RAILROADS AND STEAMBOATS.

The old Knickerbocker, who, a few years ago, embarked on a sloop for a voyage to Albany, declaring he had no confidence in steamboats and rail-cars, expressed a very salutary doubt as to the comparative safety to "life and limb" of the modern ways of locomotion. The application of steam to travel was not more amazing in its power, to our elder brethren, than was the frequent slaughter of scores of travellers by terrific, accidents horrifying. They very naturally determined to continue in the old and safe ways, rather than adventure, when they only gained in speed at the risk of life. Although it may be doubtful if the number killed and maimed to the number who travel, may not have been greater fifty years ago than now, yet it cannot be denied that the perils of travelling by steam are, in truth, alarmingly great. From carefully prepared statistics, it appears that in this country during 1861, there were 63 railroad accidents, resulting in 101 killed and 459 wounded; in 1860, there were 74 railroad accidents, resulting in 57 persons killed and 315 wounded. The number of railroad accidents for the last nine years was 1040, giving 1267 persons killed and 4385 wounded. Steamboat accidents present a remarkable contrast to those occurring on railroads. A far greater fatality attends them, owing to the liabilities to drowning. In 1860, there were 21 steamboat accidents on our inland waters, resulting in 242 killed, and 146 wounded. During the last nine years, there have been 261 steamboat accidents, causing the death of 3070 persons, and the maiming of 1170 others.

In reviewing such statistics, the practical question which presents itself to every philanthropist is, how can modern travelling be rendered more safe? As physicians, it is not our province to discuss the causes of railroad and steamboat disasters, as they are for the most part directly traceable to bad management. The care of the injured, however, falls to our lot, and we have a direct interest in whatever tends to make our services most available in the mitigation and relief of suffering.

The attention of the profession has been called to the "Medical Provision for Railroad Accidents," in a letter published in a former number of the Medical Times, by A Country Surgeon. A plan for rendering the services of medical men more efficient on railroads, in cases of accidents, should, we think, be devised, and that recommended by the writer is worthy of consideration.

'Let the companies, where practicable, appoint district surgeons, unsalaried, but payable for actual services at the principal towns along the line, and not exceeding from ten to fifteen miles apart, the district of each to extend to the flag station nearest to midway between any two. The advantage attending such regular appointments would be, that where medical assistance was not immediately at hand, the employees would know exactly where to send. At each such surgical station a small room should be set apart on the ground floor, furnished with an iron cot bedstead and bedding, a stretcher, a small table, one or two common chairs, and a small wood stove, by which the room could be heated in a few minutes, if required in winter, or hot water, or a brick for application to the feet at any time. * * * The surgeon might also keep at the station a little linen, lint, bandages, sponges, a few splints, and such minor articles for immediate use. In case of an accident, a stretcher could be obtained from the nearest flag-station, or those from the adjoining ones, if several were seriously hurt, and the medical officer summoned, also those of adjoining stations if necessary. This would not preclude, however, the employment of any medical assistance immediately available. If the injury were too severe to risk removal, the patient could be carried to the nearest flag station until the immediate danger had subsided; when practicable, however, he should be carried to the nearest district station, his immediate wants there attended to, and provision made for safe removal."

If this, or some similar plan were adopted by our railroad authorities it cannot be doubted that very many lives now lost would be saved, and much suffering would be promptly relieved after those terrible accidents which so often thrill community with horror.

In steamboat disasters, upon our rivers and lakes, there is universally great need of immediate and efficient medical aid. Many of the steamboat accidents consist of explosions, and the resulting injuries are of a nature that demand instant attention. Frequently these casualties occur many hours before the destination is reached, and the victims, if they survive, suffer untold miseries. Every Ocean steamer has to supply itself with a surgeon; the necessity is apparent, for few travellers are willing to commit themselves to the perils of a sea voyage without some medical provision. Is it not equally important that the densely crowded inland steamer should be equally provided with proper medical aid? The necessity is too apparent to require argument.

This subject is one which should not be allowed to rest until ample Steamboat and Railroad medical provision be made by every corporation controlling the great national highways.

REORGANIZATION OF THE MEDICAL DEPARTMENT OF THE ARMY.

In a former number we noticed at some length the proposed reorganization of the Medical Department of the U. S. army, in accordance with a bill introduced into the Senate by Senator Wilson. At that time we had seen but an outline of the Act, but we now have an opportunity of presenting it in full to our readers. Every member of the profession must be interested in a measure which contemplates placing the medical corps of the army in a more dignified, honorable, and influential position. The several sections read as follows:—

Section I. There shall be one Director General who shall have the rank, pay, and emoluments of a Brigadier General, and who shall, as chief of the Medical Corps, perform the duties now assigned to the Surgeon-General, and

such others as may be required by law and regulations. There shall be one Sanitary Inspector-General, who shall have the rank, pay, and emoluments of a Colonel of Cavalry, and who shall, under the Director-General, have the general supervision of all that relates to the sanitary condition of the Army, whether in quarters or in camps, and with the hygiene, police, discipline, and efficiency of field and general hospitals under such regulations as may be hereafter established. There shall be eight Sanitary Inspectors, who shall have the rank, pay, and emoluments of a Lieutenant-Colonel of Cavalry, and who shall be charged with the duty of inspecting the sanitary condition of quarters and camps, of field and general hospitals, and who shall report to the Sanitary-Inspector-General, under such regulations as may be hereafter established, all circumstances relating to the sanitary condition and wants of troops and of hospitals, and, to the skill, efficiency, and good conduct of the officers and attendants connected with the Medical Department. There shall be not exceeding forty Surgeons of the first class, who shall have the rank, pay, and emoluments, each, of a Major of Cavalry, and who shall ordinarily be assigned to staff, bureau, and hospital duties. There shall be not exceeding fifty Surgeons of the second class, who shall have the rank, pay, and emoluments each, of a Captain of Cavalry, and who shall ordinarily be assigned to duty with regiments. And there shall be not exceeding one hundred Assistant-Surgeons, who shall have the rank, pay, and emoluments, each, of a first Lieutenant of Cavalry, and who shall perform such duties as are now required of assistant-surgeons. There shall be not exceeding one hundred Medical Cadets, who shall not be less than eighteen, nor more than twenty-three years of age at the time of entering, who shall be examined by a Board of Medical Officers in such branches of medical sanitary science as the Director-General may order. After three years of continuous service, and on producing proper testimonials of character from the medical officers with whom they have served, they may be examined for promotion by a Board of Medical Officers of the army. They shall have the rank, pay, and emoluments of the highest grade of non-commissioned officers of the army. There shall be as many Hospital Stewards as the exigencies of the service may require from time to time to be designated by a Sanitary Inspector on the recommendation of the senior-surgeon of the post, division, regiment, or military department, where their services may be required, and they shall have the rank, pay, and emoluments of first-sergeants of cavalry.

Sec. II. Be it further enacted, that immediately after the passage of this act, it shall be the duty of the President to select from the medical corps of the army suitable persons to fill the offices of Director-General, Sanitary Inspector-General, and Sanitary Inspectors, provided that no one shall be appointed to either of said positions who shall have attained the age of sixty years.

Sec. III. And be it further enacted, that promotion in the medical corps, up to the grade of Surgeon of the first class, inclusive, shall be by seniority, but that the grades of Inspector-General, Sanitary Inspector-General, and Sanitary Inspectors shall be filled by selection from the whole corps, and by such officers as shall have shown their peculiar fitness for such positions.

Sec. IV. And be it further enacted, that the Surgeons of the first and second classes provided for by the first section of this act, shall be appointed from the medical corps of the army as at present organized, and in accordance with requirements of Section III. of this act, and that the consequent vacancies in the grade of Assistant Surgeons shall be filled by appointment from civil life; provided that no one shall be appointed an Assistant Surgeon in the army, or promoted to the grade of Surgeon of the first or second class until he shall previously have been examined by a board of Army Medical officers, and found qualified, physically, morally, and in medical and sanitary attainments, for the office, and the adequate performance of its duties.

Sec. V. And be it further enacted, that so much of the act of that allows additional rations to Surgeons and Assistant Surgeons upon the completion of ten years' service in their respective grades be, and the same is hereby repealed.

Sec. VI. And be it further enacted, that every medical officer of the army who has attained the age of sixty-five years, or on attaining that age, shall be retired from active service, and shall be entitled to receive the pay and emoluments allowed to officers of corresponding rank, by the act of

Sec. VII. And be it further enacted, that all acts and parts of acts inconsistent with the provisions of this act, be, and the same are hereby repealed.

The features of this Bill, which will arrest attention, are: 1. The increase in the force of the Department; 2. The elevation in rank; 3. The formation of a corps of medical cadets; 4. The promotion to the highest places in the Department by merit, and not seniority; 5. The retiring of officers at the age of sixty-five. The Bill, as drawn, was evidently designed to place the medical department of our army on a basis corresponding with those of Great Britain and France. The title of the chief officer is very properly changed from Surgeon General to Medical Director—a change long since made in the English medical department In 1814, the head of the U. S. Army Medical Bureau was styled "Physician and Surgeon General." The addition of a Sanitary Department, properly appointed, is a most important improvement, and cannot fail to commend itself to the good sense of our legislators. The rank is also a great advance, but still it is not what military science in our day requires. There can be no good reason why the first Medical Officer should not be a Major-General. It is doubtful whether Medical Cadets, as a distinct corps of the staff, will prove desirable. In every position where medical services are required, fully qualified surgeons can alone properly discharge the duties. In large civil hospitals, undergraduates are now rarely admitted, and much less should they be intrusted with responsible duties in military hospitals. Promotion to high offices according to merit, and not by seniority, is now becoming the prevailing custom in other departments. It has its advantages, and its disadvantages. While it stimulates the young and ambitious to perform meritorious services, it cannot be denied that it places the office within the arena of political influence, and in that respect might seriously compromise its efficiency. Still, towards that general regulation, our own as well as other Governments are tending, and we should not be disposed to reject it. Indeed, promotion by merit was, we believe, the rule in the early history of the medical department of our army. Surgeon-General Lovell, who succeeded Physician and Surgeon-General Tilton, was thus promoted. Finally, the retiring of officers after a given age must be a rule in every department of government requiring great energy and activity.

The importance of a reorganization of the medical department of our army is an admitted fact by military officers no less than by the Medical Staff itself. The events that have occurred within the last six months have revealed the defects of the present organization, and call for immediate reform. The medical profession should seize the present opportunity to place this branch of public service, in which they have a special interest, on the most elevated basis. Medical men throughout the country can do much to further this object by communicating with their representatives in Congress.

THE WEEK.

A MEETING of the Associate Members of the U. S. Sanitary Commission, and of members of the Commission resident in the city of New York, was held at the rooms of the Century Club, in the evening of Thursday, the ninth day of January. His Honor, GEORGE OPDYKE, Mayor, was called to the chair, and MR. G. F. ALLEN appointed Secretary. The chairman addressed the meeting, impressing the great value of the services the Sanitary Commission has rendered and is now rendering the nation, and the urgent necessity which exists for the prompt accomplishment of the object to further which the present meeting was specially convened—the thorough reorganization of the medical department of the Army. The REV. DR. BELLOWS, chairman of the Sanitary Commission, addressed the meeting, laying before it the present condition of things in the medical department of the army, the pressing necessity of some official and efficient machinery for providing for and regulating the sanitary condition of the troops, and the considerations which render a complete and thorough renovation and reorganization of the medical department of the army absolutely indispensable. DR. VAN BUREN then gave the meeting the history of the present Medical Department of the Army, and in a more detailed and professional way, the practical defects of the present system in our Army, contrasting it with the systems now existing in the Armies of France and England.

MR. STURGIS, after some introductory remarks, moved the following resolutions with preambles:—

Whereas, The efficiency of our troops, the economy of our treasury, the confidence of the people at home, and the success of our national cause finally depend as much upon the *health* of the army as upon great generalship, hard fighting, sound legislation, or good financiering; and

Whereas, The health of every army is largely dependent on the constitution and efficiency of its medical department, and its disposition and ability to employ all known preventive and curative methods with foresight, energy, and zeal, and

Whereas, The existing medical department of the U. S. army being skilfully adapted to the economical and simple wants of the few thousand men hitherto, happily, competent to our national need, is, on this very account, far behind the wants of an army of more than half a million of men. Therefore,

1. *Resolved*, That the humanity and intelligence of the American people demand that the vast body of citizen-soldiers now in the field, fighting for the life of the nation, shall not be without the protection of the most efficient medical organization known to military experience in any part of the world.

2. *Resolved*, That the existing organization of the medical department of the army, in which *seniority* is the sole law of promotion, and a colonelcy the highest grade of assimilated rank attained, is incompatible with the due importance of the department; destructive to that spirit of emulation essential to great services; fatal to the rise of merit and high qualifications in the control of affairs; and deadening to the efficiency of the department.

3. *Resolved*, That this meeting earnestly urges upon Congress, the passage of a bill, substantially such as has been introduced into the Senate, a copy of which is appended, for the reorganization of the medical department; raising it more nearly to the level of the position now enjoyed by the medical departments of England and France; securing to it the full reliance of the government and the hearty confidence of the public; and enabling it by the invigoration it would acquire under the administration of men of middle age, proven qualifications, and first-rate energy, to meet the humane expectations of the nation, and secure the largest possible amount of health and efficiency among our troops.

4. *Resolved*, That these resolutions, signed by the officers of this meeting, and by such of the members of this body as feel their truth and urgency, be transmitted to the Chairmen of the Military Committees in both Houses of Congress, to the Commander-in-Chief, to the Secretary of War, and to the President of the United States.

5. *Resolved*, That the aforesaid members of the Sanitary Commission now assembled, earnestly invite their fellow-citizens, and especially the Chamber of Commerce, and the Associated Banks, to exert their influence to secure the passage of Senator Wilson's bill (above referred to) with proper modifications.

These resolutions were seconded by DR. ALONZO CLARK, who supported them in an address to the meeting. The HONORABLE HORACE GREELEY, PROFESSOR ORDRONAUX, REV. DR. OSGOOD, DR. WATSON, MR. MCCURDY, JUDGE DALY, DR. MCCREADY, DR. GRISCOM, DR. ALEXANDER H. STEVENS, DR. JOSEPH M. SMITH, and DR. HARRIS, all spoke in support of the bill and resolutions.

—

THE practice of salting the streets of New York after every snow storm, to hasten the melting of the snow, is now forbidden by law. While it was practised, the streets were not only ankle deep with water, but this water was rendered intensely cold by the mixture of salt. Great injury resulted to the hoofs which travelled on these streets, many losing their horses as a result of the constant exposure. Children attending the public schools were very liable to have their shoes saturated with this brine, and severe colds were the consequence. As a sanitary measure, this action of the Common Council is worthy of all imitation.

—

RECENT reports from our army at Port Royal show a large amount of sickness, most of which is due to the effects of a southern climate upon northern constitutions It is noticed also that hospital provision is not sufficient for the wants of the sick. This is to be regretted, as much suffering and a largely increased mortality must result.

Reviews.

TEN LECTURES INTRODUCTORY TO THE STUDY OF FEVER. By ANDREW ANDERSON, M.D., Lecturer on the Practice of Medicine in Anderson's University, Glasgow. London. 1861. Pp. 180.

FEVER is a disease the study of which presents peculiar difficulties to the student. Firstly, it is complex in itself—its types and varieties are numerous—its pathology is yet undetermined; then, there is no lack of treatises upon the subject, and each author, following his own plan of arrangement and classification, has multiplied the labors of the student, and often perplexity has resulted instead of assistance being rendered. It may not seem likely to lessen the confusion arising from a multiplicity of authors that another shall come forward to present his peculiar views. Still the writer of this little treatise has, in our opinion, succeeded in attaining the end he had in view—to present such a view of fever in general, and of the relations of the individual fevers to each other, as should aid the student in mastering the subject. It is not a treatise on fever, exhausting the subject by a systematic consideration of the disease in general, and its individual divisions, but a sketch of the disease, so that its nature may be understood, its relations determined, and the bearing of its varieties observed. A

teacher of experience here gives us what he has judged the best plan of presenting to the mind of students one of the most complex and important subjects of practical medicine. As the oldest and most experienced may derive benefit from reviewing elementary subjects, and as those for whom the work was published cannot fail of being profited, we do not hesitate to devote a portion of our space to an analysis of its contents.

Among the *causes* of fever cold and various irritations may be ranked, but they do not frequently give rise to the disease, rather causing inflammations than fevers. By far the greatest number of fevers are produced by poisons, and of these there are four—"Malaria, poisonous emanations from vegetable matter; effluvia, poisonous emanations from animal matter; the specific contagious emanations from particular fevers, as typhus for instance; and epidemic influence—a poison existing in the atmosphere, coming we know not whence, acting we know not how."

The consideration of the period which elapses between exposure to the cause, and the development of the disease—the period of latency, or incubation, gives occasion for the following practical remarks:—

"When a person has been exposed to the contagion, say of typhus, and begins to complain of languor, lassitude, headache perhaps, and slight sickness, then is the time for trying to ward off the disease. Remove him from the source of contagion, keep up the vital power by camphor, quinine, ammonia, alcoholic stimulants in moderation; and in many cases I do believe you will succeed—just as in the case of malaria, quinine introduced into the system so fortifies it, that although the poison must needs be absorbed into the blood, it does not there produce the effect it otherwise would. I believe it is at this period of the fever that emetics can be of use. If the fever has fairly developed itself I do not think you can cut it short; and during the stage of incubation anything that exhausts the patient is injurious. You must not fight against the fever. One of our own profession, let us say, feels the indications of on-coming fever: determining to resist it to the last, he continues to go about in his usual way. I believe this is the very worst thing that can possibly be done in the stage of incubation. Every effort ought to be made to keep up the vital system, and not exhaust it."

To the question "What is fever?"—a question which has elicited so many answers, upon which so many controversies have arisen, and the fruitful parent of so many theories—our author does not respond in the sense of fixing upon any particular pathology for the disease. He does not, therefore, commit himself to the "nerves" or the "vessels"—does not adduce arguments to maintain "spasm," or waste time in combating "relaxation." One thing he impresses upon the mind of the student—the fact that there is idiopathic fever—fever independent of any local lesion, whatever complications may arise to modify its progress or interfere with its termination. He occupies himself with the changes which we can observe during fever—with the effects it produces—rather than with the ultimate cause or nature of the disease.

Fever, he teaches, consists of two parts, relating to—1st, its nature; 2d, its progress. The first has a triple division—into derangement of the blood, derangement of the nervous system, and derangement of the processes of assimilation. The second may likewise undergo a triple division consisting of the series of phenomena which succeed each other in a typical case—the stage of depression, the stage of reaction, and the stage of subsidence. The latter cannot of course co-exist as they relate to time; of the former any two, or all three, may, and often do, exist together. Four things are present then in every case—the *three* "derangements" in greater or less degree, and *one* of the "stages;" each of these four elements may vary widely as to the extent of departure from the normal state, and thus we have a key to the infinite complexity and variety of fever and fevers.

Now from the proportionate predominance of any one of these six elements, three of progress, and three of nature, we have six *types* of fever; when the stage of depression is in excess we have the *congestive* type, familiar to practitioners in the western portions of our country, because so frequently seen in our bilious remittents and intermittents;* when the stage of reaction becomes excessive we have the inflammatory type; when that of subsidence, the asthenic. If derangement of the nervous system predominates we have *nervous* fever; if the blood presents the most marked departure from health the fever is *septic;* and if the processes of assimilation are especially deranged we have the *typhoid* type. To these two types are prefixed by the author, the *mild*, where the symptoms are not severe enough, and the duration not sufficient to allow of classification under either of the other types, and the *toxic*, where the like effect is produced by the evidence of the poison or the rapidity of its action—the patient dying "as if by aconite or arsenic."

In this connexion we must remark the ease with which the author impresses the difference between the "typhoid type" of fever, and "typhoid fever;" any fever may be typhoid in character without being typhoid fever, paradoxical as the statement may appear. He adopts the name of "enteric fever," from Wood, discarding entirely, and recommending others to discard, the name of typhoid as applied to the fever with lesion of the follicles and glands of the intestines as an essential part of its existence. It is to be regretted that there is no ground for hope that his influence will be extensive enough to produce a change so much to be desired in the medical language of the country. The term "typhoid fever" as applied to the "follicular enteritis" is so interwoven with the literature of this country, so impressed upon the mind of the profession, that it seems impossible to get rid of it, and to substitute a more precise and less perplexing designation.

After a brief but clear description of each of these types of fever, and a sketch of the treatment adapted to each, the *forms* of fever are given. They are five in number; ephemera, often seen in the puerperal state, intermittent, remittent, continued, and relapsing.

Next follow the complications of fever, as resulting from special tendencies on the part of the disease, as bronchitis in measles, or on the part of the patient, or from epidemic influences prevailing. Others occur frequently in almost any kind of fever, the most important of which are cerebral and pulmonary complications. Upon the first there are some very excellent practical remarks:—

"We have two forms of cerebral complication, consisting the first in determination of blood to the brain, the second in congestion; the first being attended by maniacal excitement, the second by stupor deepening into coma; and the one will lapse into the other. *In the first form* there are flushed face, red eye, and a violent, fierce delirium. This is generally implanted on the inflammatory type of fever. * * * * One of the commonest symptoms we meet in fever is headache, but that is no certain sign of determination of blood to the brain. Generally when a patient begins to be delirious, headache is no longer complained of; and it is remarked, and I believe with justice, that if he still complain of headache through his delirium, you have good reason to fear that there is actual determination of blood to the brain, if not inflammatory action there. Mere headache is like pain in the back in fever. In all these cases let the head be shaved, let leeches be applied if necessary, but in moderate number, and apply cold to the head by clothes kept continually wet.. Quiet the pulse with aconite [veratrum viride?] or with antimony, if the patient's bowels are not irritable. * * *

"In the most part the patients in these circumstances die comatose, gradually falling into *the second form* of cerebral complication, which resembles in many points poisoning by opium; stupor insidiously comes on, gradually deepening down upon the patient. At first you can rouse him; by-and-by you cannot rouse him at all; ere long he dies in coma. * * * How are we to treat this congestive form of head complication? Usually the patient is too weak for any depressing remedy, so that leeching is out of the question. Blistering is our sheet anchor, but the blister must be a large one. See that it be large enough to

* We will not stop here to inquire whether the essence of this form is really *congestion*, or not—whether the derangement is in the vessels or the nerves—a question which is agitated by Mr. Martin in his work on the Influence of Tropical Climates. The term *depression* well represents to the practitioner the state of the patient.

cover the head from the brow to the occiput; this sometimes marvellously removes the coma. There are two substances, anti-narcotics they might be called, which may be used in this form of cerebral affection. A strong infusion of *green tea* is sometimes useful in helping to bring the patient out of stupor; and as regards *turpentine*. I presume that it acts the part of an alterative astringent, and forces the blood out of the congested organ, or produces, as in purpura and syphilitic iritis, some unknown specific change upon the poisoned fluid."

Of the efficacy of blisters to the scalp in these circumstances we can bear strong testimony from experience gathered in an epidemic of enteric fever. Yet in these days of homœopathic proclivities active remedies are not in favor with the public even in violent diseases, and frequently the patient is deprived of the chance of cure by the prejudices of his friends.

The pulmonary complication of fever is perhaps more important than the cerebral—the greater frequency of its occurrence and its insidious approach more than balancing the greater danger of the head affection. The lung as complication is generally congestive in nature, but rarely passing into inflammation—arising "from the loss of tone of the capillary vessels consequent upon the action of the fever poison, and from gravitation, as the patient constantly lies upon his back." The relative frequency of respiration in comparison with the contractions of the heart is pointed out as a valuable indication of the presence of the complication when it is not shown by pain, cough, or want of breath. Also the point is impressed that if the respiratory murmur is found puerile in front we may be sure of the lungs being implicated in their posterior portions, although the patient be so weak as to prevent us from making a direct examination of the dorsal region of the chest.

"The treatment of this complication is very difficult. We have to deal with the debility and want of tone of the vessels. * * * Besides alcoholic stimulants with decoction of senega, carbonate of ammonia and camphor are perhaps our most valuable remedies, with, locally, dry cupping and turpentine stupes; while blisters may be applied, for a short time only, so as to produce a powerful derivation to the surface. Oil of turpentine, in doses of twenty minims, is sometimes as useful in this as in other asthenic congestions of fever; and if suffocation be threatened by the gathering mucus of the smaller bronchi, an emetic of sulphate of zinc or mustard may, for the time at least, ward off the danger. If the dulness on percussion be so marked as to prove that there is typhoid pneumonia, I believe the best additional thing we can do, is to give the patient whatever chance of benefit there may be in the mercurial action; and that blue pill, and squill with quinine, may yet save him. There is nothing contradictory in combining tonics and stimulants with mercury."

To this follows a consideration of the sequelæ of fever, as erysipelas, œdema of the glottis, imflammation of the parotid gland, etc., and then a chapter on the general management of fever cases, and of convalescence, in which the student will find many valuable practical hints.

(To be continued.)

Correspondence.

FEES FOR MAKING AUTOPSIES.

[To the Editor of the American Medical Times.]

Sir:—In looking over the Report of the Board of Supervisors, just published, I find numerous charges for *post-mortem examinations*, made by various physicians during the year. It is understood that most, if not all, of these autopsies were made by order of the coroners, and the fee for this service varies from five dollars (the ordinary rate allowed) up to one hundred and fifty dollars, which is *extraordinary*. Why this great difference in the compensation? While, on the one hand, the house-physicians and surgeons of our hospitals are allowed but five dollars (which is no compensation for their time and trouble, not to speak of their attendance upon the courts of justice), especially in cases of homicide, it appears, on the other hand, that certain friends of the Coroner, or Supervisors, may be allowed any sum which they may see fit to demand.

We think that the physician has a just claim for ample compensation in these cases, some of which demand much time and minute examination, and that in obscure cases, requiring the services of an expert, he should be allowed extra compensation. It has, I think, been the usage in this city, not to make any charge for autopsies in private practice, unless made for special reasons, by request of friends.

Now the great burden falls to the lot of the hospital staff, in our public institutions; and we are informed that for this service five dollars is all that is allowed by the coroner in such case, including, of course, the attendance of the physician in court, in criminal cases, by which much valuable time is lost. Attempts have frequently been made to remedy this evil, but hitherto without success. Why should the paltry pittance of five dollars be doled out to an over-worked junior, while the extraordinary sum of one hundred and fifty dollars is cheerfully allowed to a senior practitioner? Cannot a more uniform rate be allowed in these cases, which, while it should be satisfactory to the profession as a body, will, at the same time, protect the community from extortionate charges.

A Tax Payer.

STRICTURE OF THE URETHRA.

[To the Editor of the American Medical Times.]

Sir:—Many years ago, while assistant to Mr. Ringrose, an excellent country surgeon in England, a man presented himself with spasmodic stricture. Every effort to relieve him having failed, Mr. R., without hesitation, introduced a small canula and trocar just over the pubes, in the median line, and drew off the water, and keeping him on his back, left the canula in for twenty-four hours. Meanwhile, the urine had resumed its natural course. On withdrawing the canula the aperture closed, and not the slightest inconvenience was experienced. In the case of Matthew L., reported at Bellevue Hospital, in your number of January 4, nothing prevented me from adopting the above method, but the fact that the relief could only be temporary. After learning the circumstances of the case, and carefully trying every catheter, from No. 1 up, I suggested his immediate removal to the hospital for general treatment, he living at a distance of six miles from this place.

Yours, etc.,

Edmund Arnold.

Yonkers, Jan. 7, 1862.

Medical News.

The Army in Western Virginia.—The Buffalo *Medical Journal*, for January, 1862, contains a letter from a soldier in the army of Western Virginia, translated from a German paper, giving an account of the abuses to which the army is subjected, by sutlers, surgeons, etc. "In the hospitals at Sutton," he says, "it was horrible to see these unfortunates lying scattered upon the floor, without receiving proper treatment and medicines, and without hardly ever being asked or examined where and from what they suffered; did not deem it necessary to examine the patients, but contented with asking the Steward 'How are they all this morning?' to which he received the usual reply, 'All right!' except some had grown seriously worse, and some had died during the night." The writer bears testimony to the efficiency and kindness to the sick of Dr. Charles R. Minne, U.S.A., son of the eminent surgeon of Buffalo. This young surgeon was on Gen. McClellan's Staff in Western Virginia, and is rapidly acquiring an enduring reputation.

ERRATUM.—Last line in Dr. Martin's paper (p. 86), read "oblique uterus" instead of "oblique pelvis."

PUBLICATIONS RECEIVED.

Transactions of the Medical and Physical Society of Bombay. No. VI., New Series. For the year 1860. Bombay: 1861.

Indian Annals of Medical Science.

The Excision of Joints. By Richard M. Hodges, M.D. Boston: 1861.

MEDICAL DIARY OF THE WEEK.

Monday, Jan. 27.	NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M.
Tuesday, Jan. 28.	NEW YORK HOSPITAL, Dr. Watson, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.
Wednesday, Jan. 29.	NEW YORK HOSPITAL, Dr. Cock, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Sayre, Is. Hos., half-past 1 P.M.
Thursday, Jan. 30.	NEW YORK HOSPITAL, Dr. Peters, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Taylor, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.
Friday, Jan. 31.	NEW YORK HOSPITAL, Dr. Watson, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Flint, half-past 1 P.M. EYE INFIRMARY, Dr. Noyes, half-past 1 P.M.
Saturday, Feb. 1.	NEW YORK HOSPITAL, Dr. Cock, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Wood's Clinic, 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICES.

NEW JERSEY STATE MEDICAL SOCIETY.—*The next annual meeting of the New Jersey State Medical Society, will be held in New Brunswick, N. J., commencing Tuesday, Jan. 28, at 7½ P.M.*

By HENRY H. LEEDS & Co.

On WEDNESDAY EVENING, JAN. 29th, at 7½ o'clock, at the residence No. 88 Fifth Avenue, near 14th Street.

LARGE AND VALUABLE

LIBRARY OF MEDICAL BOOKS,

SURGICAL INSTRUMENTS, ETC.,

By order of the Executors of the late DR. KISSAM, deceased. Among them will be found the following valuable books, viz.:—

Velpeau's Midwifery,
Works on Diseases of Eye and Ear,
Broussen's Médecine Physiologique,
Scarpa's Traité des Hernies,
Traité d'Anatomie Descriptive,
Fifty-eight Vols. Johnson's Medico-Chirurgical Review,
On Dislocations and Fractures of the Joints, Sir Astley Cooper,
Bell's Anatomy,
Spurzheim, on the Anatomy of the Brain,
Lizars' Anatomical Plates,
The New York Journal of Medicine, complete for the years 1844 to 1859.
The British and Foreign Medico-Chirurgical Review, complete for 1852 to 1860.

And other Books comprising about five hundred volumes. Also, the entire collection of Surgical Instruments.

They will be ready for examination on the day of sale, from 10 A.M. to 4 o'clock P.M. Catalogues can be obtained at the house, or at the office of the Auctioneer, No. 25 Nassau Street.

Wanted, by a young Physician, a situation with an old practitioner, or any one who has more practice than he desires to attend to, with a view to purchase an interest or the whole of same business. Or would purchase a physician's practice after giving it a trial, and becoming satisfied of its worth.
Address PHYSICIAN,
Care of BAILLIERE BROTHERS,
440 Broadway, New York.

Rensselaer Polytechnic Institute, Troy, N. Y.—The seventy-sixth semi-annual session of this Institution for instruction in the Mathematical, Physical, and Natural Sciences, will commence Feb. 19th, 1862. A full course in Military Science is now in progress.
Further information, with the Annual Register, can be obtained of PROF. CHARLES DROWNE, Director.

Medical Society of the State of New YORK.—Pursuant to Statute, the Fifty-fifth Annual Meeting of the Medical Society of the State of New York, will be held on the first Tuesday of February next (Tuesday, February 4th, 1862), in the City of Albany. The meeting will be held in the City Hall.
SYLVESTER D. WILLARD, M.D., SECRETARY.

Wade & Ford are now manufacturing DR. JOSEPH H. VEDDER'S walking splint for Morbus Coxarius.

BOOKS
ON
MILITARY SURGERY,
FOR SALE BY
BAILLIERE BROTHERS
440 BROADWAY.

JUST RECEIVED, COMPLETE COLLECTIONS OF THE ENGLISH GOVERNMENT REPORTS ON THE MILITARY MEDICAL DEPARTMENT, VIZ.:

Medical and Surgical History of the British Army, which served in Turkey and the Crimea during the War against Russia in the years 1854-5-6. 2 vols. 4to. London, 1858. $12.50.

Report of the Commissioners appointed to inquire into the regulations affecting the Sanitary Condition of the British Army, the Organization of Military Hospitals, and the Treatment of the Sick and Wounded; with Evidence and Appendix. 4to. London, 1858. $10.

Report of the Proceedings of the Sanitary Commission despatched to the Seat of War in the East, in 1855-56. 8vo. London, 1857. $4.

Statistical, Sanitary, and Medical Reports of the British Army, for the year 1859. London, 1861. $2.50.

General Report of the Commission appointed for Improving the Sanitary Condition of Barracks and Hospitals in the British Army. Folio. London, 1861. $2.50.

As these Reports are now difficult to be procured, intending purchasers are requested to make early application for them.

Armand, Histoire Medico-Chirurgicale de la Guerre de Crimée. 8vo. Paris. $1.85

Baudens.—La Guerre de Crimee, les Campements, les abris, les ambulances, les hopitaux, &c., &c. Second edition, 12mo. Paris, 1858. $1.

Bertheraud.—Campagne d'Italie de 1859. Lettres Medico-Chirurgicales écrites du Grand-Quartier général de l'armée. 12mo. Paris, 1860. $1.00.

Bertheraud. Campagnes de Kabylie. Histoire Medico-Chirurgicale des Expeditions de 1854, 1856, and 1857. 8vo. Paris, 1862. $1.80.

Boudin.—Resumes des dispositions legales et reglementaires qui president aux operations medicales du recrutement, de la reforme et de la retraite dans l'armée de terre. 8vo. Paris. 50 cts.

Boudin.—Systeme des Ambulances des Armées Francaises et Anglaises. 8vo. Paris. 87 cts.

Boudin.—Souvenirs de la Campagne d' Italie. 8vo. Paris. 75 cts.

Cazalas. Maladies de l'Armee d'Orient. Campagne de 1854-55-56. 8vo. Paris, 1860. $1 25.

Fraser. A Treatise upon Penetrating Wounds of the Chest. 8vo. London, 1859. $1.60.

Gross, S. D.—A Manual of Military SURGERY; or, Hints on the Emergencies of Field, Camp, and Hospital Practice. 24mo. Philadelphia. 50 cents.

Guthrie.—Commentaries on the Surgery of the War in Portugal, Spain, France, and the Netherlands. With Additions relating to the War in the Crimea. 8vo. London. $4.65.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians (principally country Physicians) Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bourbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyosciamus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Record says; that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

CLINICAL LECTURES ON THE PUERPERAL DISEASES.

DELIVERED AT THE BELLEVUE HOSPITAL MEDICAL COLLEGE.

By B. FORDYCE BARKER, M.D.,

PROFESSOR OF MIDWIFERY AND DISEASES OF WOMEN, ETC., ETC.

LECTURE I.—PART II.

ON PUERPERAL CONVALESCENCE.

The Lochia.—The lochial discharge usually decreases in a very marked degree for a few hours on the second or third day, during the existence of what is termed the milk fever. It is sometimes entirely suspended at this time, and the nurse should be prepared by your instructions for such an occurrence. The turpentine stupe placed over the hypogastrium, and retained as long as the patient can bear it, will usually restore the discharge. On the other hand, the sanguineous discharge may continue too long and be of too bright a color. Examine the uterus and ascertain whether its size is progressively decreasing. Keep your patient rigidly in the horizontal position, and free from all emotional excitement. If the uterus remains so enlarged, that it can be readily felt above the pubes, you will probably find it useful to give her half a teaspoonful of Squibb's fluid extract of ergot, every two hours; and if she be of a delicate habit and anæmic constitution, tonics are indicated. I shall occasionally give you formulas for prescriptions, that you may become familiar with my mode of prescribing. I trust that this will not lead you to become routine practitioners, as it surely will not, if you form the habit of carefully analysing every formula to ascertain the special indications fulfilled by each article in the combination. Well then, you have a feeble, delicate, anæmic patient, and the lochial discharge continues profuse and of a bright color, six or eight days after labor. You find the uterus remaining above the pubes, nearly as large as a child's head. You give her ergot, as I before described, and, in addition, you make a prescription something like the following:—℞. Quiniæ sulph. ʒj.; ferri sulph., gr. xij.; ext. nucis vomicæ, pulv. capsici, āā, gr. vj.; M. Ft. pil. (argent.), No. 12. S. one three times a day, directly after eating. Now, ask yourselves what is the object of the quinine, the iron, the nux vomica, the capsicum? I have seen, quite frequently, this condition associated with a very profuse lactation, which is an additional drain upon the system, and the patient is nervous, irritable, and suffers from headache and insomnia. Now, what advantage will you obtain by adding to the above formula four grains of opium? She will then take one-third of a grain in each pill, or a grain in the twenty-four hours.

In some, fortunately rare cases, a profuse and dangerous discharge of blood may come on some days after delivery. This has been termed *secondary hæmorrhage*, and it is all-important to determine the cause from which this accident has arisen. It may arise from simple relaxation of the uterus; second, from premature exertion or excitement of the patient; third, from retention of a coagulum or some portion of the secundines; fourth, from polypus, submucous fibrous tumor of the uterus, or some malignant disease of the uterus; or, fifth, from partial or complete inversion of the organ.

The normal duration of the lochia varies greatly in different individuals. Sometimes the nurse, and even the patient herself, are greatly alarmed from an apprehension that the lochia have ceased at too early a period after delivery. The early cessation of the lochia, unaccompanied by any other symptom of puerperal disturbance, is not a cause for anxiety, but it may be a symptom of great importance in connexion with the various puerperal diseases which we shall study by-and-by. It is well to remember that, just as in abortion, if the ovum be some time dead, previous to its expulsion, there is usually very little hæmorrhage; so at full term, if a woman is delivered of a child which has been some days dead, the lochial discharge is usually much less, and ceases at an earlier period than ordinary.

Retention of Urine.—Before leaving a woman who has just been delivered, I am always very particular to direct the nurse to try and induce her to pass the urine within a few hours. The application of a warm cloth to the vulva will facilitate this effort. Sometimes by turning the patient upon her face and knees she may be able to accomplish this when she could not in any other posture; but she should not be allowed to exhaust herself in fruitless efforts to accomplish this end. This retention may be due to loss of contractility of the muscular tissue of the bladder, a kind of paralysis from over distension, or to a mechanical obstruction, the meatus or urethra being closed by tumefaction. The first condition is usually relieved by giving the patient, every fifteen minutes, for an hour or two, twenty drops of the fluid extract of ergot. After delivery, especially if the second stage be long, I always examine the bladder before leaving my patient, and if I have reason to suspect that it contains much urine, I give the nurse some ergot with directions as to its use. It is, therefore, very rarely that I am compelled to use the catheter in the puerperal woman; but where the retention is due to the second cause mentioned, the catheter is the only resource. As your text-books give you minute directions as to the guides for introducing this instrument, I shall not detain you by a repetition of these rules. I will only suggest to you the great advantage of your becoming perfectly familiar with these guides by the sense of touch, by availing yourselves of every opportunity for practice on the cadaver. When necessary, the catheter should be used every eight hours, until the patient is able to relieve herself. It sometimes happens that the physician may be misled by the unintentional misrepresentations of the nurse and of the patient herself, as in the following case:—I was called last winter, in consultation with an excellent physician, and highly esteemed friend, to see a young lady aged nineteen, whose first labor had terminated fifty-two hours before I saw her. She had slept none since her delivery, and I found her with a very sharp irritable pulse, hot skin, flushed face, red eyes, excited manner, and tympanitic abdomen. She complained of violent headache and intense pain over the hypogastrium, and for some hours previous to my seeing her, she had been frequently delirious for a few minutes at a time. My friend, who was in attendance, in answer to repeated inquiries, had been assured, both by the nurse and the patient herself, that she had passed urine many times since her delivery, and that "there was no difficulty in that respect." A thorough and careful palpation of the abdomen was very difficult, on account of the great tympanites and exquisite tenderness on pressure, but I thought that I was able to detect above the pubes the outline of a large elastic tumor, quite different from the uterine tumor, which, at this period, I ought to be able clearly to define.

I therefore asked permission to introduce a catheter, and drew off over five pints of very offensive urine. An anodyne was then given, the catheter was used every eight hours for a few days, and the subsequent convalescence was uninterrupted by a single unpleasant symptom. In our lying-in wards in this hospital, although our house staff are usually on their guard as to this source of error, I have in two instances found a large quantity of urine in the bladder, the house physician having accepted the statement of the patient that she had passed water very frequently. I learned a lesson on this point some sixteen years ago. I was asked by one of my confrères in the town where I resided, to make a post-mortem examination of a woman who had died a few days after her confinement. He attributed her death to some obscure cerebral disease, but he also said that severe peritonitis came on soon after her con-

finement, which he had successfully combated by venesection, blisters, and calomel and opium. For my present purpose, it is not necessary for me to detail the results of the autopsy, further than to say that I found in the bladder nearly a gallon of urine. This was considered very curious, particularly as the patient had passed water very frequently from the time of her confinement up to within a few hours of her death. It was not for me to wound the feelings of my friend, who was many years my senior, by unkind comments, but I internally drew my own inferences, and in my own mind "made a note of it." Enough has been said to lead you to see the necessity for making a careful examination of the abdomen after confinement.

Laxatives.—In most women, after confinement, the bowels are not opened until some means for this purpose are used, and castor oil is the article which is undoubtedly more frequently given than anything else. I suppose that three-fourths of all the women confined in this country, take a dose of castor oil on the second or third day after delivery. Now I do not consider this routine practice judicious. Many patients do not require any laxative, the bowels acting spontaneously on the second or third day. I therefore wait for some indication of the necessity for such an agent before prescribing one, and then I very rarely select castor oil, for the following reasons:—It is to most patients an exceedingly nauseous disagreeable medicine to take, and where there is any tendency to piles, which is very frequently the case after labor, it is one of the worst agents that you can select. I have frequently observed severe suffering from piles, following the evacuation of the bowels from a dose of castor oil. For these reasons I have therefore almost wholly given up its use as a laxative after confinement. The selection of the agent must depend upon the special indication in each individual case. If a laxative is required simply on account of torpor of the bowels, an enema of warm water and castile soap, thrown up the rectum very slowly and gently, is much better than any medicine administered by the mouth; or if the patient has a great aversion to an enema, as some have, the following pills, taken directly after breakfast, will usually act efficiently and without pain:—℞. Ext. colocynth co., pulv. rhei (Turk.), āā, gr. iij.; ext. hyoscyami, gr. ij.; ext. nucis vomicæ (alcoh.), gr. j.; ol. caryoph., gtt. j.; M. Ft. pil. No. 3. Let me here state that laxative medicine should always be given to the puerperal woman in the morning. Where the laxative is needed, and there are flatulence and severe afterpains in consequence, I have found the following an excellent combination:— ℞. Fld. ext. sennæ, syr. zingib. āā, ʒ vj.; tinct. jalap. ʒ ss; tinct. nucis vomicæ, gtt. xl; M. S. a tablespoonful in a wineglass of water. If the derivative action of a cathartic is needed on account of milk fever, the symptoms of which I shall presently describe, two or three of the compound cathartic pills of the U. S. Dispensatory are perhaps the best agent that you can select. But if your patient has any tendency to or has suffered from piles, I am sure that you will find the following combination invaluable:—℞. Magnesiæ sulph., magnesiæ carb., sulphur. sublim., potass. sup.-tart., āā, ʒ ss. M. benc. S. one or two teaspoonfuls of the powder in any agreeable vehicle.

Piles are very common during pregnancy, and in some cases where they did not exist during pregnancy they come on after delivery, add greatly to the suffering of the patient, and seriously interrupt convalescence.

You know that they are sometimes external, arising from the orifice of the anus. If these become inflamed and very tender, a soft bread-and-milk poultice, with a teaspoonful of the aqueous extract of opium, should be applied, and renewed two or three times a day. It may sometimes be necessary to scarify them, or, if a coagulum is formed, the tumor should be laid open with a lancet, and the contents turned out. After the inflammation has subsided, the ung. gallæ comp. may be smeared over them two or three times a day, which will generally reduce their size and hasten their disappearance. The internal piles are the most painful, as they form within the sphincter and are forced down when the bowels are moved and remain outside. They are grasped by the sphincter and strangulated. Whenever they come down they should be at once returned within the sphincter, by careful, gentle, but firm manipulation. By this management, in connexion with the laxative that I have before mentioned, your patient will rarely suffer much from internal piles. But you see that it is always your duty to make a careful examination to ascertain whether the piles are external or internal.

The subject of my next lecture will be *Lactation*, which will of course include milk fever, sore nipples, and mammary abscess.

Original Communications.

MEDICO-LEGAL POINTS IN A CASE OF SUSPECTED HOMICIDAL CUT THROAT,

AS PRESENTED AT A MEETING OF THE NEW YORK ACADEMY OF MEDICINE, HELD DEC. 18, 1861.

By A. CLARK, M.D.,

PROFESSOR OF PATHOLOGY AND PRACTICE OF MEDICINE IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

(*Continued from page* 50.)

BLOODY FLUID IN THE PLEURITIC CAVITIES.

An important point in this case seems to have been, that the effusion in the pleuritic cavities must have taken place prior to the cut in the neck. Here, so far as I can ascertain, is raised for the first time the question, whether suffocation can produce bloody effusion into these cavities. It becomes interesting to inquire whether there is any precedent for such an opinion. I have searched through the ample records of suffocation, hanging, drowning, and strangulation, and through essays devoted to these subjects, and have failed to find a single instance. Cazauvieilh "On Suicide," reporting in detail fourteen cases of strangulation and submersion, noticing the thoracic organs in every instance, makes no mention of such an effusion. Brièrre de Boismont (*Annales d'Hygiène*, xl. 425) in a summary of remarkable things noted in 797 Procès-Verbaux of cases of strangulation and suspension, makes no allusion to any such occurrence; the examination in all these cases being soon after death. Olivier de Angers (*Annales d'Hygiène*, xviii. 845) examined sixteen of the twenty-three persons suffocated by pressure in the Champs de Mars on the 14th of June, 1837, and found effusion of blood in the pleura in none, though ribs were broken in seven from two to thirteen in each.

It seems, then, to be safe to infer that neither blood nor bloody effusion in the pleuritic cavities is ever the direct result of suspended respiration, no matter how produced; that when such effusion is found, excepting when attended by laceration of the lung through violence, it is always either a pathological condition and attended by particular symptoms during life, or a post-mortem result, that may be considered in the light of a drainage. Even in drowned persons, in whom it is most frequently met with, there is no evidence that it is ever observed till after days, and many times weeks, have elapsed.

Devergie remarks (*Annales d'Hygiène*, xvi. 444) that bloody effusions, the result of decomposition, are very common, always in serous cavities, the pleura, pericardium, and sometimes in the peritoneum. They are the result of decomposed blood, which is very fluid, and transudes the tissues, staining them, and occur only after the generation of gas.

Devergie and Orfila are the authors to whom we are chiefly indebted for a knowledge of the fact here referred to. Devergie (*Annales d'Hygiène*, ii. 164) made examinations of sixty-two bodies of persons found drowned, and

took note of the condition of the thoracic cavities in each. Of these forty-five were recognised, and their histories consequently known. The examinations were made in the months of January, February, March, and April, that is, in the cold season of the year. He found at the end of a month of submersion, that the lungs were very emphysematous, filling the cavity of the chest, and extending more or less in advance of the pericardium. At the end of *two months* the cellular tissue in many parts had imbibed the blood of the adjoining vessels, and had become of a uniform red color. Veins had become emptied of blood, and ordinarily were distended with gas. The arteries were red by imbibition through their walls; the pericardium partaking of the color of the arteries, containing bloody serum. In *three months and a half* the lungs no longer filled the cavity of the chest; the space between them and the pleura costalis was filled with reddish serosity, and the serum in the pericardium was less than at earlier periods, was also less liquid, and of a deeper color. At *four months and a half* the pleuræ contained a large quantity of brownish serosity, at least a pound in each.

He remarks that these effusions are almost constant in the drowned, when the bodies have remained more than six weeks in the water, and expresses his belief that they are the results of transudation of the blood and liquids of the vessels in consequence of the development of gas in these tubes. Yet, he remarks, these gases did not remain there always, for after four months and a half the walls of the vessels were effaced and collapsed on each other. That these effusions, however, are not in the drowned purely the result of drainage, is rendered probable by a case recorded by Alexander Watson, in which it is stated that a man thirty-five years of age was drunk, and fought with several persons, and disappeared March 12, 1833, and eight days after was found in a pool of water, at a depth of twenty-eight or thirty feet, with marks of violence upon his head, and other signs which gave rise to the suspicion that he had been murdered, and afterwards thrown into the water. "Eight pounds of fluid blood were taken out from the cavities of the pleura, and several ounces of the same fluid were found in the pericardium." The specific gravity of this fluid is reported to have been 1011. This statement proves conclusively that the fluid was not blood; even that it was not undiluted serum retaining the color of blood. The specific gravity of blood is 1050 to 1057 in health, and in disease it does not fall below 1031: that of serum varies from 1021 to 1030, the healthy standard being 1027. In dropsies, in diseases of the kidney, and after profuse hæmorrhage, it has not been found below 1013. There is no reason to infer that the serum in this man would fall below the healthy standard: blood must have been diluted by four times its bulk of water to have reached the specific gravity here mentioned, and the bulk of serum must have been doubled to have reached the same standard.

But these effusions are not confined to the drowned. Orfila (*Annales d'Hygiène*, iv. 114), in judicial examinations, has often seen this fluid in the pericardium, and has found the blood black and fluid in the vessels for one to eight months after death. He appears to have met with effusion in the pericardium more frequently than in the plenra. In his *Exhumations Juridiques* (*Médicine Légale*, vol. i. p. 405, fourth edition), however, he reports several instances in which the fluid was found in the latter cavities. *Necroscopy* 1.—Eighteen days after death a considerable quantity of bloody serum was found in both pleuritic cavities; the person had died of donble pneumonia. *Necroscopy* 2.—Thirty-seven days after death there was also double effusion of a similar character. The person was supposed to have died of pneumonia, which, however, was single. It was also found in the pericardium. *Necroscopy* 5.—One hundred and twenty-four days after death a similar effusion was found in the pericardium, and not in the pleura, the person having died of pneumonia. *Necroscopy* 27.—Thirty-two days after death, eight ounces of bloody serum were found in each pleural cavity. The person had died of apoplexy. He also reports the case of a drowned person, who nineteen days after death had eight ounces of bloody fluid in the right pleura, and none in the left.

Prof. Toulmouche (*Annales d'Hygiène*, July, 1860, p. 210), in his report of judicial autopsies made in cases of natural death, found bloody fluid in the thoracic cavity in three out of ten cases recorded. Thus in *Case* 4, in the right pleuritic cavity there was a moderate effusion of bloody serum. The lung of this side was in a condition which led the reporter to believe that the patient had died of pneumonia. He does not state how long the body had been buried. *Case* 5, which has its duplicate, was in an advanced state of decomposition; there was emphysema under the surface tissues, blisters in all parts filled with bloody serum, adhesions on the entire face of the left lung, and a small quantity of reddish fluid in the pleuritic cavity of that side. There was pneumonia of both lungs, but no bloody effusion is reported on the right side.

It will be noticed that in many of these cases the lungs may be supposed to have been more than usually charged with blood at the time of death. And it cannot be denied that both reason and observation would lead us to expect such effusions most frequently in such cases; still it is to be noticed that even in the cases here referred to, drainage is recorded from lungs that were not diseased, and not supposed to have been engorged in any unusual degree.

That drainage may occur from such lungs appears still further evident from a case reported by Champouillon (*Annales d'Hygiène*, xxxiv. 377). It was that of a soldier in Algeria, who lacking courage to accompany his comrades in a charge, allowed himself to fall from his horse in a marsh. He remained there for several hours, and a few days after died of malignant miasmatic fever. At post-mortem examination, fourteen hours after death, the weather being warm (June 10), the body was much discolored by decomposition; many parts were swollen by gaseous evolutions, and were crepitant on pressure of the fingers. His lungs were highly emphysematous, and pushed out of the open thorax. The pleuræ pulmonales were lifted here and there by the evolution of gas. In each of the pleural cavities there was a sero-sanguinolent fluid, the quantity of which was estimated at two litres, or about four pints, and this fluid was covered by an oleaginous layer of considerable thickness. The peritoneal cavity contained about half a litre (one pint) of the same kind of fluid, without the oily matter.

Gendrin injected into the groin of a cat, blood taken from a butcher, who had been attacked with gangrenous pustule and putrid fever. The animal died in a short time: a few hours after the body was sensibly fœtid. At the autopsy there was found in the left pleura "black blood very serous."

Devergie (*Annales d'Hygiène*, iv. 203) discovered bloody fluid in the thoracic cavity of a fœtus at term, that had not breathed, but had lain in the water six or eight days.

These cases and statements embrace nearly all that I have been able to find bearing upon the post-mortem drainage of the lungs while yet in the natural cavities, but it has appeared to me important to ascertain what quantity of fluids may percolate the tissues of the lungs and pleura after death, from lungs regarded in all respects as healthy when removed from the body. To this end I have instituted a few experiments.

The following will be sufficient to illustrate the points these experiments may settle.

I. A woman, sixty years of age, weighing ninety pounds, died on the 17th of May, 1860. The right lung appeared perfectly healthy; weighed seventeen ounces, displaced f. ʒ xxxvij. of water, giving a specific gravity of ·442. The root of the lung was firmly tied, and the organ was placed, root uppermost, in a glass jar, and carefully covered. The drainage in ten days was four ounces of a dark, bloody serum. The left lung, weighing twenty ounces, was thought to be slightly congested, and was not used for the experiment.

II. A woman, æt. 25, died April 6, 1860, of mania, each

lung weighing fourteen and a half ounces. The left lung displaced f. ʒ xviiss of water, giving a specific gravity of ·797; the right displaced f. ʒ xxj. having a specific gravity of ·663. The root of this lung was tied, and the organ suspended by the ligature in a glass-stoppered jar, and the drainage in seventeen days was f. ʒ iij. and f. ʒ j. The weather being a part of the time hot, decomposition was now advancing, and the experiment was suspended.

III. A woman, æt. 50, weighing one hundred and twenty-one pounds, died, having pneumonia of the right lung. The left lung appearing perfectly healthy, weighed seventeen and a half ounces, and displaced f. ʒ xxvj. of water, giving a specific gravity of ·644. It was tied and suspended as in the last experiment in a stoppered jar. In fourteen days the drainage was f. ʒ viiss. The lung then weighed nine and three quarter ounces, and displaced f. ʒ xivss., the specific gravity being then ·653.

IV. The fourth experiment was conducted for me by Dr. Segur. A woman, æt. 21, weight estimated at one hundred and ten pounds, died of meningitis. The right lung weighed thirteen and a half ounces, and displaced f. ʒ xviiss. ounces, giving a specific gravity of ·729. Suspended in a stoppered jar for fifty-five days the drainage was f. ʒ ixss.; the lung then weighed four and a quarter ounces, and displaced f. ʒ vj. of water; the specific gravity being then ·680. Here it will be seen that in fifty-five days more than two-thirds of the ordinary weight of the lung has drained from it in fluid matter, leaving the lung tissue not yet dried weighing no more than four and a quarter ounces.

These experiments illustrate what may take place within the body after gaseous matter has been developed to some extent in the pleuritic cavities and in the vessels of the lungs to facilitate the transudation of the fluids. It will be borne in mind that while it is denied that the lungs, in the case which is the occasion of these remarks, were congested in the sense in which that term is usually used, that is, that the vessels at the time of death contained more than their usual quantity of blood, yet it is not denied that they contained more of this fluid than would have been looked for had the woman died of hæmorrhage from the femoral artery or other vessels, the severing of which did not imply the severing of the trachea.

PULMONARY APOPLEXY.

It was claimed by the prosecution that in the right lung there were several points of pulmonary apoplexy, and that statement was admitted as true on inspection of the part of the lung. The explanation given by the prosecution and defence was very different; the former claiming that these effusions were the result of suffocation; the latter, that so far from having been produced by this cause, their very existence proved that no suffocation had been attempted. No cases were cited, and it is believed that no instance can be found in which suffocation has produced circumscribed pulmonary apoplexy. If the explanation which Watson (*Pract. Phys., 3d Amer. Ed.*, p. 613) and Carswell (*Path. Anat.*, part Hæmorrhage) have given of this occurrence is admitted, it will appear obvious that the fact is inconsistent with asphyxia in any form. Watson, speaking of the ordinary occurrence of pulmonary apoplexy, says: "The seat of the effusion is in one or more of the larger branches of the air tubes and the blood, or a part of it is driven backwards into certain of the pulmonary lobules by convulsive efforts to respire. * * * * It is easy to understand how certain portions of the lung, without undergoing any actual change of condition, may be so choked up and crammed with blood as to preclude any subsequent admission of air." He here speaks of the variety called circumscribed apoplexy of the lung, which was the variety observed in the lung in question. This choking up and cramming with blood is a filling of the air cells of the lungs. This can be made evident by the same procedure by which we determine the seat of the effusion in pneumonia: by the aid of a lens the little coagulum formed in a single air cell can be turned out with the point of a needle and its character ascertained under a microscope, and thin sections of pulmonary apoplexy under the microscope can be easily made to show that it is the air cells that contain the blood and not the general tissue of the lung. Now it is claimed that pulmonary apoplexy of this variety can be produced in cut throats merely by a forcible inspiration taking place while the trachea is more or less filled with blood from the cut, and inasmuch as "convulsive efforts to respire" are necessary so to fill the air cells, it is plain that such efforts are not likely to take place during an attempt at homicidal suffocation; and further, on this supposition there is no source from which the blood can flow to be drawn into the lungs. Those who have noticed the effect of cutting the trachea and large vessels of the neck in the inferior animals will easily understand this. After the wound is made, for some seconds there is no effort at inspiration, but before death takes place there are usually three or more, and one or more of these will be observed to be convulsive and noisy from the blood that has already entered the severed windpipe; and as an observed fact circumscribed apoplexy of the lung does take place in these animals under these circumstances, and will occur in the right lung when the body of the animal is inclined to the right, or in the left lung when inclined to left.

In confirmation of this view of pulmonary apoplexy, I may be permitted to cite a case that occurred under my own observation. At Bellevue Hospital, some years ago, we had a patient who had occasional vomitings of blood, from ulcer of the stomach. One day, while enjoying the sun and air on the south side of the building, sitting with other patients on a bench, he suddenly discharged from his stomach a large quantity of blood. A loud gurgling noise was heard in his breathing, and he fell dead. At post-mortem examination, coagulated blood was found in the stomach. The trachea and bronchial tubes contained frothy blood, and both lungs were studded with numerous masses, large and small, of circumscribed apoplexy. There was no other lesion of the lung. It seems to me clear, that this man, feeling the urgent want of breath while the throat and mouth were full of blood, had drawn this fluid into the lungs by one or more violent inspirations.

(To be continued.)

ON THE USE OF IPECAC IN

CHRONIC DYSENTERY AND DIARRHŒA.

By H. D. BULKLEY, M.D.,

PHYSICIAN TO THE NEW YORK HOSPITAL.

(Read before the New York County Medical Society.)

The favorable effect of the internal use of ipecac in four cases of chronic dysentery and diarrhœa, under my care at the New York Hospital, during the months of September and October last, leads me to present a short abstract of them, in confirmation of the accounts recently given us by some of the British journals of the use of this article in these forms of disease in the East.

The first case in which I gave it was in a sailor, 27 years of age, who had been suffering from the disease three months, but whose general health had not been materially affected by it. He had had ten to fifteen stools in twenty-four hours at times; and when he entered the hospital, the discharges were still as frequent, and consisted entirely of blood and mucus, with more or less griping pains, and considerable tenesmus. Pulse 84, weak. He was directed to take fifteen drops of laudanum, and to have a sinapism on the epigastric region as a preparatory treatment, and in the course of half an hour, to take ten grains of ipecac in powder at one dose. This was retained, with little or no nausea, and at the end of twelve hours the same dose was repeated, with the same preparatory treatment. The stools became entirely fæcal very soon after the first dose, and of a yellow color, and their frequency was very much diminished, and it was not intended that he should have a second dose, but it was repeated before the next visit to

the hospital. The stools were at first thin, but soon became more consistent, until at the end of eight or ten days, when they became almost entirely natural both in color and consistency, no more blood ever having appeared during his stay with us except on two occasions, when a slight coagulated mass of not more than half a teaspoonful appeared on the top of two almost perfectly natural stools. The pain in the abdomen ceased entirely, and his appetite became very good. He continued in this favorable state during the remainder of his stay in the hospital, which we could not induce him to prolong beyond fourteen days, on account of his apparently healthy condition.

The second case was also that of a sailor, 51 years of age, who had contracted dysentery five months previously in the East Indies, and who had suffered from it almost continuously since that time, and to such an extent that while at sea, the discharges from the bowels were almost constantly escaping as he was about his work, and were sometimes bloody and sometimes mucous. He had suffered most of the time from pain in the abdomen, and had lost considerable flesh, though free from any marked fever. On admission into the hospital he complained of much pain and tenderness over the abdomen, and during the first twenty-four hours had eleven or twelve passages from his bowels, the larger proportion of the passages occurring during the night, which was about the average number of passages during the week previous to admission.

He was at once ordered to take fifteen drops of liquor opii sedativus, and to have a sinapism over the epigastrium, and at the end of half an hour to take ten grains of pulverized ipecac at a dose. This was followed by slight nausea, but not by vomiting; and during the following twenty-four hours he had about six discharges from the bowels. He was then directed to take a second dose of ten grains of ipecac, preceded by the same preparatory means, which produced no vomiting. The discharges were then reduced to three in twenty-four hours, and were of a bilious character, though still somewhat thin. At the end of eight days, the report states that his bowels were regular, his appetite good, and that he was fast gaining strength. He was only confined to his bed during the first days of his stay in the hospital. On the twelfth day after his admission he was allowed to visit outside, and the next day he had two or three stools, and complained of some griping pain in the bowels, but this looseness ceased on the following day. He continued, however, to complain for several days of that griping which is so common a sequel of dysentery when the discharge of bile becomes free, and irritates the sensitive mucous membrane of the intestines as it passes over them. For this he took a few grains of opium, which, with the two doses of ipecac, and the means used to keep the stomach quiet, was all the medication used. His stay in the hospital was twenty-three days.

The third case was in a female, 35 years of age, suffering from the effects of a severe attack of acute dysentery four months previous, who was much reduced when she entered the hospital, and was having eight to ten discharges from the bowels of a mucous and muco-purulent character. She had had sometimes as many as twenty, and seldom less than eight or ten passages in twenty-four hours. She had severe pain in her bowels whenever they were moved, and also when she ate. She had taken opium outside of the hospital without any benefit. The preparatory treatment by laudanum and a sinapism over the epigastric region, was first used in her case, and then ten grains of ipecac given, which produced vomiting in a few minutes. The next day the ipecac was repeated, after using the same preparatory means, and was also thrown off at the end of twenty minutes; but the character of the stools was entirely changed within the next twenty-four hours. They were carefully inspected for several successive days, and were found to be fæcal in their character, and of a healthy color, and soon became of a natural consistence, so that she was in full convalescence in the course of a week, and for the following fortnight she had but one passage daily. The stools were afterwards somewhat more frequent, but continued of a natural color, and free from blood or mucus. No other medicine was used. The diet in this case consisted of beef-tea, house soup, farinaceous or gelatinous articles, carefully excluding every preparation containing milk. Her appetite continued good all the time.

The fourth case was in a sailor, who had been suffering from chronic diarrhœa for some months, and who had been under the use of tonics for some time in the hospital without much benefit. The only point of interest in his case connected with our present subject is that, after a single dose of ten grains of ipecac, given in the way which has been mentioned, and which produced neither nausea nor vomiting, a dark, unhealthy looking stool was followed the next day by one of a bright yellow color, and that he was much better afterwards, and became so impatient that he left the hospital at the end of a few days more.

The diet in all these cases was either farinaceous or gelatinous, except in that of the female, in which animal broths were given—milk was prohibited in all of them.

My attention was first called to the use of ipecac in these doses in chronic dysentery and diarrhœa by a case stated by Dr. McKidd, in the *Edinburgh Medical Journal* for July, 1861, in which he gave twenty grains (reduced in a few days to ten grains) in the form of pill every twelve hours, with the most remarkable effect to a patient who had suffered from diarrhœa for ten years. The diarrhœa is said to have been almost entirely checked by the end of the first week. The cure had lasted three months when the case was reported.

In the same journal is an article by Dr. Cunningham, of Bengal, who speaks of it more especially in acute dysentery, as confirmatory of the plan of treatment recommended by Surgeon Docker, in 1858. He gives from 3j. to 3iss. of ipecac in powder, after having first given thirty drops of laudanum, and applied a sinapism over the epigastric region for the purpose of making the stomach more tolerant of the remedy.

Dr. E. H. Janes has given a valuable abstract of the treatment of the acute form by large doses of ipecac, with statistics of the results in the third volume of the MEDICAL TIMES (page 28, and also page 274) taken chiefly from the *Madras Quarterly Journal of Medical Science*, which contains also an interesting summary of the mode of treatment of this disease in that part of the world. No allusion is made to its use in the chronic form of dysentery and diarrhœa, and it was thought that the preceding cases, though too few in number to form the basis for any statistics, might be the means of directing attention to the use of means which may relieve, at least occasionally, a class of cases known to be among the most obstinate in their resistance to remedies, and which too often go on to a fatal termination with but little if any alleviation.

It is said that the native doctors of Constantinople invariably give large doses of ipecac in dysentery, and that their treatment of it is very successful. They regard milk diet as an absolute poison in its treatment.

THE PRESENT

STATUS OF PSYCHOLOGICAL MEDICINE.

By I. PARIGOT, M.D.,

LATE COMMISSIONER OF LUNACY IN THE COLONY OF GHEEL, BELGIUM, ETC.

II.—Status of American Psychological Medicine in Europe.

I TAKE great pleasure in mentioning the general opinion entertained by foreign psychologists of the value of the scientific productions of their American brethren. It is with much satisfaction that we state that science unites what politics endeavor to separate. If West and Central Europe is enabled to appreciate the American writers, it is entirely owing to the English medical press, especially the two journals on psychiatry. A single example will illustrate the influence which they exert on foreign judgment.

The Psychological Journal, edited by Dr. Forbes Winslow, states that American institutes for the insane are in many respects superior to European. The same journal has always entertained the highest esteem for American authors.

When North America was but a colony, psychological medicine must have been in a relative condition to what the science was at that time in the mother country. What indeed must its state have been in this then distant part of the British empire, when, at home, insane people were considered and treated as criminals? It will naturally be asked. Was insanity as prevalent at that time as it is now? It certainly could not have been, and for many reasons: First, emigration took place for a very different cause than now. Those who left their country were, at that time, generally speaking, men full of energy, who sought only for a place where they could enjoy civil and religious liberty. Then also, labor, temperance, firmness in design, resolution in action, and submission to the will of God, were sufficient to dispel many moral causes of insanity. Under such circumstances the strength of bodily constitution probably enabled them to resist many causes of degeneracy—causes to which society seems to yield in our time. At all events, insanity was not very prevalent, much later, in proportion to the increase of population; for but one asylum, specially designed for the insane, existed as late as 1815; this was at Williamsburg, Virginia. In the other States, the poor were received in general hospitals, or kept in work-houses or in prisons. etc.

It is about that time that the celebrated Benjamin Rust published his work, entitled *Medical Inquiries upon the Diseases of the Mind*. Nothing is more simple and grand than the exordium of this book, and exhibits at once the great abilities and the modesty of its author. The proof of the value of the book lies in the fact that it is still consulted: it contains, it is true, some errors which belong as much to the time in which he wrote as to himself: but what is very remarkable is a profound analysis of our faculties, especially that of *Volition*, considered both in their normal and pathological conditions. The author, much better than many writers in our time, distinguishes very well a *disease* from a vicious disposition.

Since 1820, forty-five public asylums of great dimensions have been erected by different States, and there are six private institutions, which makes the sum of *fifty-one* asylums, with their corresponding number of physicians, who, most of them, have deservedly acquired high reputation and fame—at least they are so considered in Europe. The disproportion of asylums to the population is evident, for the United States, according to statistics, has above thirty millions of inhabitants, which must give not far from *thirty-five thousand* insane patients. Belgium has also just fifty-one asylums, but her population gives *four thousand* lunatics to *five millions* of inhabitants. A proper record of the services rendered to science and humanity by Samuel Woodward, Amariah Brigham, T. R. Beck, Macdonald, and many other departed celebrities, would fill up much of our space, if we should record them, and we shall defer to other occasions to render them the respect and admiration they are entitled to from every one.

Before speaking of the actual leaders of psychological science in the United States, justice and politeness give precedence to a lady, Miss Dix, who has written several memoirs in behalf of the insane: her name is now connected with philanthropic efforts in behalf of our soldiers! This noble-hearted lady has described in these papers the state in which she found many insane patients in poor-houses, prisons, *cellars*, and even *cells* in several States of the Union. Let us hope that such abuses have disappeared.

I do not believe that any country possesses a better staff of psychologists than that which now presides over the public and private asylums of this country. Without endeavoring to mention all, we cannot forbear to allude to Dr. Ray, of Providence, whose writings are in the hands of every psychologist who reads the English language; Dr. Jarvis, of Dorchester, whose reports as Commissioner in Lunacy for Massachusetts, and several memoirs, have proved him one of the ablest psychologists and administrators of our times; Dr. Pliny Earle, of whose works it is difficult to say which is the most important; the staff of writers of the *American Journal of Insanity*, at the actual head of which is Dr. J. P. Gray, should be noticed; Dr. Galt, of Williamsburg, is the first American Psychologist who has shown the advantage of free-asylums, such as Gheel, in America; Dr. Kirkbride, of Pennsylvania, has contributed many important memorials, among which is one on *Cottages for the Insane;* Dr. Howe is the authority on idiocy; Dr. Butler, Dr. C. Browne, and Dr. Chipley have written excellent reports, from which we shall take occasion to gather our information.

In our opinion, the United States, notwithstanding the difficulties arising from a civil war, is in a position peculiarly favorable to accelerate the progress of psychiatry. The number of asylums is greatly deficient, but insanity will now increase from the evils, both moral and physical, that accompany times of war and revolutions. If public expenditures must be suited to the times, asylums may be constructed on principles different and more economical. The cost of buildings may be reduced one-half, and the maintenance to perhaps the two-thirds of what it is to-day.

Since the days of the first reformers, Pinel, Daquin, Tuke, Laugermann, and others, there has been a sort of *stand-still* in that movement towards a relative perfection of psychiatry. Our best writers in Europe and America have been almost exclusively occupied, these fifty years, in the details of the construction of asylums. How much has not the therapeutical part of our science been neglected, when the excellence of treatment was considered to be derived from the effect and impressions obtained by discipline, order, regularity, and the divisions and subdivisions of an asylum? How much time, and how many favorable opportunities are lost to science when the material cares of asylums all rest upon superintendents? Some, it is true, in spite of those difficulties, have been able to advance psychiatry, but they are exceptions. Besides, it is clear that they have not given an impulse to therapeutics; their mistake has been to have the care of too great a number of patients, rendering it an impossibility that each should receive the attention required. During this period immense asylums were built on curious principles; economy was sought by *barracking* several hundred of insane (Colney-Hutch near London has nearly 2000 boarders); it was thought that if steam could boil, cook, wash, warm, etc., for a few hundreds, an increasing number of inmates would make a profit! Physicians were considered in the same light; one physician might as well attend to three, four, five, or six hundred patients! The consequence of that *supremacy of mechanism* in treating insanity, and of that impossible economy of a proper staff of physicians, has been the complete impracticability of such establishments as curative ones.

Now, that system is almost condemned everywhere; the reform is going to resume its former action, and, no doubt, instead of building machines to perpetuate insanity, it will have but one care—to cure.

Army Medical Societies.—A medical society has been formed in Gen. Richardson's Brigade, of which Brigade Surgeon D. W. Bliss is President, and Surgeon William O'Meagher, of the 37th N. Y. Vol., Secretary. A medical society has also been formed at Cairo, Ill., of which Surgeon Stearns is President, and Surgeon Taggart, Secretary.

Personal.—Dr. James Bryan, of Philadelphia, has been appointed a Brigade Surgeon in the Burnside expedition. Dr. Henry S. Hewitt, late of this city, is Medical Director of the forces at Paducah, Ky.

Mr. Spencer Wells, who has edited the London *Medical Times and Gazette* since 1853, retired with the close of the last year.

Reports of Hospitals.

U. S. GENERAL HOSPITAL, WASHINGTON, D. C.

I.—GUNSHOT WOUND OF CAROTID ARTERY—SECONDARY HÆMORRHAGE. II.—DIPHTHERIA FOLLOWING TYPHOID FEVER.

[Reported by Lewis H. Bodman, Medical Cadet, U.S.A.]

I. *Gunshot Wound of Carotid Artery, etc.*—Corporal Calef, 2d N. H. Volunteers, was fired on by a sentry, Aug. 7, 1861. The ball entered his left cheek, fractured the inferior maxilla just anterior to its angle, and turning downwards in its course buried itself in the deep structures of the neck. There was considerable hæmorrhage at the time of the accident, but when admitted to the hospital a few hours afterwards, he was in a comfortable condition, bleeding having entirely ceased. No search was made for the ball, but the edges of the fractured bone were retained in apposition by means of a suitable bandage, and quiet enjoined. Diet to consist of nutritious soups and beef-tea. The patient continued in good condition until the afternoon of the 13th, nearly a week after the reception of the injury, when lying quietly in bed he was seized with violent arterial hæmorrhage. The blood poured from his mouth, welling up with each pulsation of the heart. Fortunately a medical officer was in the ward at the moment, and resorted to instant compression over the carotid, but not until a quart of blood had escaped was the hæmorrhage controlled. The patient being now very weak, stimulants were administered, and directed to be given frequently through the night. Continuous compression was kept up over the artery. Notwithstanding these measures, bleeding recurred on two different occasions during the night, and was controlled with great difficulty. The patient sank rapidly until the morning of the 14th, when he died by syncope in another and terrible attack of hæmorrhage.

The *autopsy* made three hours after death disclosed the following lesions: a comminuted fracture of the inferior maxilla just anterior to the angle. Through this the course of the ball could be followed by means of a bougie, down and along the track of the common carotid. The ball was found directly under the omo-hyoid muscle, and imbedded in the sheath of the artery. The artery itself had been lacerated, and the neighborhood of the injury was filled with clotted blood and lymph.

II. *Diphtheria following Typhoid Fever.*—Private Draper, æt. 16, came under observation Aug. 28, 1861, being convalescent from typhoid fever. He was improving steadily upon quin. sulph., gr. ij., and whiskey, an ounce, three times a day. Under this treatment he continued, apparently doing well, until Sept. 3d, when he complained of a cough and "sore mouth." On examination a few spots of follicular ulceration were detected, scattered over the lips and inside of the cheeks, with some signs of inflammation in the throat. A gargle was ordered of liquor sodæ chlorinatis, 3j.; aquæ 0ss. In the evening an ordinary cough mixture was prescribed, with a view to allay the cough, which had a peculiar ringing or "brassy" sound. These prescriptions were continued until the 6th, patient meanwhile remaining without change, when at the morning visit a small patch of false membrane was discovered just in front of the velum palati. Chlorate of potassa, one drachm to the ounce of water, was prescribed internally, a tablespoonful to be given three times a day, and the gargle was continued. On the 7th the patient was rapidly growing worse, the membrane having covered both tonsils, and extending downwards into the larynx. Pulse quick and feeble. Skin dry and hot. Continued the prescriptions of yesterday, giving instead of the whiskey a tablespoonful of brandy every three hours, with beef-tea in suitable quantities. 8th. Was very restless, and failing in strength. Pulse frequent and very weak. The membrane seemed still to be extending downwards into the trachea; his breathing was difficult, and he coughed with great distress. There was besides some swelling of the cervical glands. Twelve grains of quinine were dissolved in one ounce of the muriated tincture of iron, and five drops ordered every hour. His throat was sponged twice to-day with a strong solution of nitrate of silver. 9th. Patient passed an uneasy night, and was much distressed in the morning for breath, and extremely irritable in mind. The dose of iron and quinine was increased during the night, and stimulants freely administered. He lingered until 1 P.M. of the 10th, when he suddenly expired.

Autopsy three hours after death.—The larynx was covered with an ash-colored, consistent layer of false membrane, which extended downwards through the trachea and into both bronchii, and upwards over the tonsils on each side into the nares. The heart was natural in appearance. The lungs presented signs of hypostatic congestion and of commencing pneumonia. The liver was somewhat fatty. Kidneys congested. In the ileum there had been disease of Peyer's glands, but *an attempt at cicatrization was in progress*, prior to the attack of diphtheria.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, December 4, 1861.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. FORDYCE BARKER'S PAPER ON THE USE OF ANÆSTHETICS IN MIDWIFERY.

(*Continued from page 54.*)

Dr. Geo. T. Elliot, in opening the discussion for the evening, remarked that he had had no experience with any other anæsthetic agent than chloroform, and hence he considered it unnecessary to state that he agreed with Dr. Barker in considering it the preferable agent to ether. He never attended any case of labor without having chloroform in the room, without being willing to offer its advantages, if there was no objection on the part of the patient or the patient's friends, or no physical contra-indication to its use. He could conscientiously say, as the result of no limited means of observation, that he had seen nothing whatever that would cause him to depart from the use of chloroform in accordance with the light of such experience. He had himself taken chloroform thirty or forty times since 1848; had given it to his wife, and to his nearest and dearest relatives and friends, and at all ages, from the tender child of thirteen days old up to an advanced period of life. He therefore believed that he was to be ranked among those whose experience had warranted them in assuming that chloroform was a most valuable agent in midwifery, of the greatest value in obstetric operations, that it was not likely to exert injurious effects upon the mother or child when properly administered, and that its use was perfectly justifiable for purposes of relieving pain. He was in the habit of administering the anæsthetic upon handkerchiefs, frequently changed, so that no one would be used long enough to be saturated with the vapor of the breath. By following this practice he was confident that he prevented a great deal of the suffering from headache, sickness, nausea, and vomiting, which is so apt to occur afterwards. In every case he preceded the exhibition of chloroform by an examination of the heart, and if any disease of that organ existed he preferred ether, for reasons stated at a previous meeting. He, however, did not so much fear the use of the agent in valvular lesions of the heart as in fatty degeneration of the organ, or in those cases where there existed a marked feebleness in the heart's action with a temporary intermission in the pulse. He had, however, given chloroform in cases of fatty degeneration of the heart; the patient's dying with some other disease, thus affording an opportunity of proving the existence of such a lesion by actual inspection.

As to the kind of chloroform used he was forced to state that he had given it in a great many cases without knowing whose preparation it was, merely testing it by its peculiar odor and capability for rapid evaporation when poured upon the hand. He made no distinction between Duncan & Flockhart's chloroform, and that of Squibb. The question, referring to the use of the anæsthetic after loss of blood, he thought was a very serious one to consider, and was prepared to say that he would never employ it in such cases unless he felt sure that the amount of hæmorrhage was not sufficient to produce any danger of syncope. It was *syncope* after all that he dreaded.

With reference to the influence of chloroform on the duration of labor—this was a point of great importance, and one to which he had given his careful attention, from the first time that he became familiar with chloroform in labor. He had learned this, that he never would promise a patient again that she should have chloroform given to her during the whole labor, because he could not promise against its liability of affecting unfavorably the contractions of the uterus. He had seen those cases in which the removal of anxiety and the removal of the consciousness of the patient had given freedom to the uterus to contract, as it were, forcibly and satisfactorily; but he was likewise satisfied from his own experience, that the oxytoccic action of chloroform was exceptional. In some of those cases where chloroform had interposed delay, he had delivered with the forceps, sooner than allow them to wake up to pain again.

In reference to lacerations of the perineum he did not think that chloroform increased the risk of such an accident, but on the contrary tended to prevent it. As for the effects of chloroform on spasmodic rigidity he concurred heartily and entirely with the views expressed in Dr. Barker's paper, but in rigidity from other causes he resorted to measures which he considered much more efficacious, for instance the warm douche, sponge tent, etc.

He was at a loss to understand how it was possible for any gentleman with a large obstetric experience, writing a book for the instruction of others, to say that he found that anæsthetics were not advisable in forceps cases, on account of the desirability of having the assistance of the patient's appreciation of pain. He was satisfied that he could speak to a large enough experience to enable him to form a decided opinion upon the subject, though he very much regretted to have only preserved the records of seventy-four cases of forceps operations, which did not at all represent his share. Of these, here are the results:—fifty-one in primiparæ, nineteen in multiparæ, and seven not noted. Chloroform was given in sixty-nine cases, ether in one case, and nothing in four; in all of which the reasons for its non-administration were sufficiently strong. He believed chloroform to be the most precious agent that could be employed in puerperal convulsions. He could find nothing in his record to cause him to regret having given chloroform in forceps operations, version, or craniotomy. Regarding the removal of the adherent placenta, he could simply confirm the views of Dr. Barker, with the exception that he had found it necessary to remove it much more frequently than he had. He thought that there was a very great amount of truth in that statement, that the "*ultimate*" effect of this anæsthetic was depressing. It is at first stimulating, then sedative, and *ultimately* depressing—though he had never met with danger from this state. The ultimately depressing effects are shown by the diminished frequency and force of the pulse, the diminished capillary circulation, and that coldness which Brown-Séquard pointed out in his lectures in this city some eight years ago. It is this action of chloroform which he esteemed of such value in convulsive cases, and which enabled him more and more to dispense with the bloodletting, and evacuants, and revulsives, on which so great hopes are based. It was this effect, however, which he would dread in those conditions liable to risk from syncope, previously alluded to.

Dr. Griscom remarked that in his experience he was able to corroborate everything that was said in relation to chloroform by Drs. Barker and Elliot. He had never in a single instance been disappointed in the effects of this agent. He had used ether in one obstetric case before chloroform was discovered, and was very unfavorably impressed by it, as a great deal of irritation of the bronchial mucous membrane resulted, and besides, a desirable amount of anæsthesia was not produced. The precise degree of anæsthesia requisite in obstetrics was a nice point to take into account; he had found that the best effects were produced when there was a loss of sensibility without entire loss of muscular power or of consciousness. As regards the mode of administration, his plan was simply to use a single handkerchief. In conclusion, he referred to the marked and prompt effect which the internal administration of chloroform had upon abdominal pains: the dose for an adult was about thirty drops in some mucilage.

Dr. A. K. Gardner stated that his experience with chloroform in midwifery commenced with the first case in which it was used in New York. A woman at 406 Greenwich st. was confined on Feb. 2, 1848; there was nothing unusual about the labor, the vertex presenting. He administered chloroform to her by inhalation for three hours with the happiest effects. The quantity taken was about ℥ss. The two next cases occurred respectively during the months of February and April of the same year. Since that period he had continued its use in all forms of labor. In sixty-one cases of *forceps application*, the records of which he had preserved, he had given chloroform in eighteen cases, one of which was after the blades had been applied. In one case only had he given sulphuric ether, and in one the woman was so drunk with liquor as to be completely in an anæsthetic condition. He did not think it desirable to lay it down as a rule that chloroform should be given before commencing the operation; neither did he consider it imperative that its administration should be deferred till traction was about being commenced. In the hands of a skilful operator, there was no pain felt from the forceps while being applied; but when applied by a bungler, there might be very great pain, and this should be known to the operator; for pain meant injury, and injury, perhaps, was death. In those cases where the nervous condition of the mother rendered it desirable for her to be unconscious of the dreaded operation, he thought that in skilful hands there was less objection to its early administration.

He had administered chloroform in five cases where the *tractor* had been used; three with chloroform and two without. *Version*, he had, since the same date, performed twenty-one times; in nine cases—one of rupture of the womb—without chloroform, and fourteen with this article. *Cephalic Version*, in one case, without it. In these operations, he was fully persuaded that no one should attempt to perform them without having recourse to anæsthesia, inasmuch as it was sometimes necessary to paralyse the involuntary contractions of the uterus, as well as the voluntary, accessory, abdominal and other muscles. He did not think that chloroform was demanded for the operative part of craniotomy, inasmuch as there was little suffering connected with the operation, and the uterine contractions had generally mostly, if not entirely, ceased when the operation was performed. Usually, too, the efforts of the mother were desirable to expel the fœtus, after the head was broken up; and often there was but little comparative pain during the expulsion of the much-reduced head, particularly if it had been hydrocephalic. *Rupture of the perineum*, he thought, occurred far less frequently with chloroform, than without it. The effect of chloroform was the same in the analogous cases of *rigid os*. There was nothing more certain than the immediate and marvellous effects of this agent in overcoming the spasmodic contractions of the os uteri, which delayed the labor and exhausted the patient in the early stages. He had often completed a labor in half an hour, which threatened without it to endure for hours. If time was the object to be gained, his method would be to give the anæsthetic until its effect

was produced, ordinarily not requiring full anæsthesia; then passing his finger within the os, it might be stretched out, like soft gutta percha; then "letting up" the chloroform, so as to restore the use of the voluntary muscles, the labor was very rapidly completed in primiparæ, and almost instantaneously in multiparæ, as the rigidity of the os did not return, and it had been expanded sufficiently to allow the head to impinge upon it. *Vomiting* frequently occurred after and during the administration of chloroform, but which invariably ceased as soon as the contents of the stomach were expelled, and was more apt to occur where the patient had been eating or drinking freely within a short time previously. This was the only bad effect he had ever noted from chloroform, except that sometimes he had observed slight convulsive stiffening before coming fully under its influence: this was, in one or two instances, so unpleasant in its appearance, that he had been induced to stop its further administration, more as a matter of precaution than of real necessity. He had never seen an instance of *post-partum hæmorrhage* where chloroform had been used; the reason for which he supposed to be, that all irregular and spasmodic actions of the uterus, such as those causing "hour-glass" and other imperfect and natural contractions, were thus controlled by quieting the irritation of the spine, upon which such actions are frequently found to depend. He supposed that chloroform acted first on the lower portion of the spinal cord. Still, where in previous labors there had been hæmorrhage, he had sometimes thought it desirable to exhibit a full dose of ergot, before chloroform, to the patient. The *duration of labor* was unquestionably shortened by chloroform, for the reason that by the relaxation of the perineum it prevented any impediment to the advance of the head. He had found that to make a labor progress as speedily as possible, chloroform should be given only to the point of producing muscular relaxation. He had known the administration of the article, in doses of from five to ten drops, to be attended with the best of results in after-pains; this being inhaled with the commencement of each pain. He had seen *no disease, save acute inflammation of the lungs, in which he thought it improper to resort to the anæsthetic.* He had used it in epilepsy, in fatty degeneration of the heart, in diseases of the valves of the heart, and even in the last stages of phthisis, without any bad result. He had supposed, in all these cases, that there was less danger from the chloroform to the diseased organs than from the straining efforts. In all his cases where chloroform had been taken, none of the muscular soreness usually following labor and lasting for several days ever appeared; and patients, the next day, were much better than ordinary, and got up much easier and sooner. Referring to its *mode of administration*, he stated that it was best to commence slowly, bearing in mind that some patients were more susceptible to its influence than others. He had seen ten drops anæsthetize one patient, while another required ʒj. or ʒij. The *quality*, with him, was always of the utmost importance. He considered that the obstetrician was perfectly justified in giving it simply for the relief of the ordinary pains of labor, and he was always ready to give it to most women, with the restrictions mentioned already.

On motion of Dr. Watson, the further discussion of the subject was postponed.

The Academy then adjourned.

Several of the Paris medical journals give the various ages of the present professors of the Faculty of Medicine, which are as follows:—M. Moreau, 72; M. Cruveilhier, 71; M. Rostan, 71; M. Piorry, 67; M. Paul Dubois, 66; M. Velpeau, 66; M. Andral, 64; M. Bouillaud, 64; M. Langier, 63; M. Jobert de Lamballe, 62; M. Trousseau, 60; M. Guillot, 59; M. Moquin-Tandon, 57; M. Malgaigne, 55; M. Nélaton, 54; M. Dénonvilliers, 53; M. Gavarret, 52; M. Bouchardat, 51; M. Grisolle, 50; M. Longet, 50; M. Tardieu, 45; M. Würtz, 44; M. Gosselin, 43; M. Jarjavay, 42; and, lastly, M. Regnault, 37.—*Lancet.*

Progress of Medical Science.

OPHTHALMOLOGY.

By Henry D. Noyes, M.D.

The Pathology of Capsular Cataract. By Dr. Schweigger, *of Berlin.* (*Archiv für Ophthalmologie*, Bd. VIII., Ab. I., S. 227.)*—The crystalline lens in the normal state consists of prismatic fibres, or, according to Kölliker, tubules with toothed edges by which they adhere to each other. They contain a semi-fluid substance of an albuminous nature, and transparent. The capsule inclosing the lens is a structureless membrane, with difficulty destructible by chemical reagents, and very slow to lose transparency. Between the anterior capsule and the crystalline lens is a layer of six-sided nucleated epithelial cells. These do not exist upon the posterior capsule, nor upon the front surface of the anterior capsule.

In former days there was no hesitation in classifying cataracts into capsular, lenticular, and capsulo-lenticular. On the contrary, Malgaigne affirmed that capsular cataract never occurs, the membrane always preserving transparency, and in proof he offered many dissections. We now know that the capsule does become opaque. It is not true, however, in cataract, that, as Tyrrell says, "no practical good would result from the most accurate diagnosis as regards the seat of the opacity."

The practical good which results from diagnosticating in a case of cataract the existence of capsular opacities is, that their presence is evidence of complicated cataract. In other words, they show either that the cataract has undergone secondary degeneration, or that the cataract is produced by disease of other tissues of the eye.

By capsular opacities are meant, densely white spots upon the surface of a cataract which contrast more or less strongly with the duller tinted mass. They do not consist so much in change of texture in the capsular membrane itself: this is almost always found to be transparent, and thus far Malgaigne's assertion may be admitted. But the membrane is wrinkled and thrown into folds, it becomes thickened and also thinned. The intra-capsular epithelium undergoes alteration. Opaque lens matter is precipitated upon and attaches itself to the capsule. Such in general is the nature of capsular cataract.

Opaque spots on the capsule give evidence: 1st. Of an "over-ripe" or so-called Morgagnian cataract; 2d. Of chronic irido-choroiditis as the cause of cataract.

One of the signs consulted to determine the "ripeness" of a cataract, is the breadth of the shadow cast upon it by the iris. Mackenzie says, "if the shadow is distinct, the lens is probably small and hard." There is an error here implied, namely, that the whole lens has shrunken and has withdrawn from contact with the iris. We know that the front surface of the lens is always in contact with the pupillary margin—and in cataract a very trifling diminution in bulk takes place. The explanation of the broad shadow is that while the nucleus has become opaque the cortical layers are yet transparent. If no shadow is cast, the whole lens has become opaque.

The cortex of the lens is softer than the nucleus, and where its fibres have degenerated so far as to lose transparency, they after a certain time lose their form. They become disintegrated and liquefied. The nuclear fibres, being harder, are not thus dissolved, and the nucleus as a yellow lentil-shaped body, contrasts strongly both in color and texture with the diffluent cortex. This cortical emulsion, consisting of decomposed lens matter, contains cholesterine, fat globules, myeline, granular matter. Between it and the aqueous humor, interchange takes place by osmosis

* I have not only condensed the article of this able pathologist, who examines the specimens furnished by Prof. Graefe's clinique, but have almost recast it to make its statements more thoroughly appreciated.
H. D. N.

through the lens capsule. The process is most free where the communication is easiest, namely at the pupil. At this situation the capsule acquires a dense opacity. It is produced: 1st. By wrinkling of the membrane, because by liquefaction of its cortex the lens has lost a little in bulk; 2d. By exosmosis, the cortical emulsion becomes thicker, and particles are deposited in a more concrete mass upon the pupillary part of the capsule; 3d. The intra-capsular cells beneath this deposit become atrophied, and adjacent to it become altered: instead of being flat and hexagonal, they are globular, elongated, filled with transparent fluid, sometimes enlarged and of irregular forms.

The kind of capsular opacity indicative of an "over-ripe" cataract, is one corresponding in size and situation to the pupil, of a glistening white color, its edges marked by striæ or dots. It often has a lustrous satiny look, because probably of the greater presence of cholesterine crystals. There are sometimes smaller opaque spots at a distance from the central spot. I may add in aid of the diagnosis, that when, in a dark room, artificial light is by a convex lens cast obliquely upon the cataract, the yellow nucleus may be sometimes seen through the fluid to have fallen from the centre to the bottom of the capsule. If the pupil be dilated it may all be seen, but if not dilated, only its upper rim can be discerned. I need remark nothing upon the importance of diagnosticating an "over-ripe" cataract before the operation is performed.

The second case in which capsular opacity gives valuable information is in the so-called "inflammatory cataract," or one resulting from chronic irido-choroiditis. The nutrition of the lens, and therefore its transparency, are impaired by the choroidal disease, and the transformation begins at the surface. Hence capsular opacities appear early. They consist: 1st. In metamorphoses of the intra-capsular epithelium—the cells generated in larger quantities and of irregular shapes; 2d. Membranes are formed which though transparent singly, yet by their arrangement cause opaque spots and thickening of the capsule; 3d. Cretaceous deposit occurs in the transformed tissue. Calcification often beginning in the capsule pervades finally the whole lens—and then the capsule may disappear by atrophy. Opacities do not take place so frequently on the posterior capsule as upon the anterior. They consist of deposits of softened lens matter, and also result by extension of the morbid generation of intra-capsular epithelium to the posterior capsule.

The practical clinical distinction between capsular opacities of chronic irido-choroiditis and of partially liquefied cataract, is that the former are scattered all over the front surface of the cataract, while the latter is mainly confined to one large central spot. Both result directly from a similar cause, namely, softening of the surface of the lens, but the causation of the softening is different.

A third variety of capsular cataract without participation of the lens, is noticed after central perforation of the cornea. This happens oftenest in ophthalmia neonatorum: by ulceration the cornea is perforated, aqueous humor escapes, the lens comes forward, and the capsule for some time lies against the aperture, exposed to the irritating conjunctival secretions. After a time the opening is closed, the anterior chamber re-established, and the cornea may recover transparency. Upon the capsule will remain a central white dot, sharply defined, and penetrating the lens to a certain depth. The capsule has not been ruptured, but contact with the opening in the cornea has caused transformations of the intra-capsular cells and adjacent lens substance.

Lastly, the capsule often remains as an obstruction to vision, after extraction of cataract. It is often dotted with dense white opacities, or totally opaque. These white spots consist partly of softened lens matter entangled in the folds of the membrane, and partly of new formations by prolification of the intra-capsular epithelium. Sometimes this extraordinary development of cells extends even to the posterior capsule.

American Medical Times.

SATURDAY, FEBRUARY 1, 1862.

NEW YORK HEALTH BILLS.

We have at length good evidence that there is to be a reorganization of the Health Department of New York city. Those public-spirited citizens who have for years labored with the most praiseworthy self-sacrifice to obtain such legislative action as would give our city a Health Department worthy of its social, commercial, and intellectual greatness, have at length given to their cause such moral force and such a momentum even in political circles, that the present Legislature cannot safely adjourn without enacting a new Health law. What gives this conclusion greater weight is the fact that all opposition seems not only to have ceased, but has even become clamorous for reform. Health bills now multiply from various quarters, put forward by some individual interest, and each in the hope of riding foremost on the coming tide. Even the grim power that presides over the Death Statistics of New York, who has hitherto stifled the legislative voice with the foul emanations of that bureau, has a health bill before the Legislature. We may take it therefore as a foregone conclusion that a reorganization of our Health Department is about to be made.

The medical profession of this city have always been deeply interested in local sanitary reform, and with them this movement originated. The question which is presented this winter is not, Shall there be a reform, but, What shall be its character? And this question is of vital importance, and we trust no physician will lend his influence to any scheme which does not embody the latest improvements in sanitary legislation. Let us require that our Health Department have: 1. A strong and efficient medical element; and, 2. That its organization embrace in area, as far as possible, every inch of territory liable to affect injuriously the public health of the city, and in authority every power necessary to remove the causes of preventable diseases. Such a Health Department we may now have, if with united voice we demand it. Shall we ask for less?

To those medical men who have not been cognizant of the progress of this measure, the following facts will prove of interest:—The first real efforts to improve our Health Department originated with the Academy of Medicine. The first health bills brought before the Legislature contemplated only such legislative enactments as would create a regular and responsible Board of Health for this city, with a medical man as the chief executive officer, and with medical men as health wardens. The provisions of the bill were entirely local in their effect; subsequent discussions and investigation have led to a material change in the character of this health bill. It was apparent to the more thoughtful that New York never could have an efficient sanitary police unless the jurisdiction of the Central Board extended to all the sources of infection and contagion which surround the city. Of what avail are well executed health laws in New York if the neighboring city of Brook-

lyn, with its constant interchange of people, takes no care to prevent the spread of contagious and epidemic diseases? And of what value is a vigilant sanitary police to New York and Brooklyn when quarantine is allowed to disseminate, without let or hindranee, the seeds of epidemic diseases to both cities? It needed no argument to prove that a mere local board of health was not all that New York with its rapid expansion required. And the same was true of Brooklyn, one of the most rapidly growing cities in this country. Whatever may be the commercial and social relations of these two cities, they are certainly one in their sanitary interests, and they never can be safe until each has a controlling voice in the management of quarantine.

Influenced by such considerations, a joint committee of the Academy of Medicine, of the N. Y. Sanitary Association, and of the Kings County Medical Society, with a medical representation from Richmond county, prepared the bill known as the Metropolitan Health Bill, which erected into a Metropolitan Health District the counties of New York, Kings, and Richmond, with their waters; the Board of Health was to be composed of a representation from each county, according to the ratio of its population, viz. four from New York, three from Kings, and one from Richmond. Three of the seven are to be medical men, viz. two from New York, and one from Brooklyn, are required to be physicians. This bill was before the Legislature last winter, passed the Assembly by a vote of two to one, and was defeated in the Senate. The same bill, after being slightly amended by a joint committee of the bodies above named, has been introduced into the present Legislature, and awaits its action.

Other health bills are already pressed upon the attention of physicians, and will be laid before the Legislature, but there will be none that have the scope of the Metropolitan Health Bill. This feature of our municipal sanitary reform can never again be lost sight of; it is that adopted by London, Philadelphia, and other cities, now famed for their power to avert pestilences, and promote the health and happiness of the laboring classes. We trust no medical man will lend his name or influence to any of the specious health measures which are in circulation. They are framed to promote the selfish aims of designing individuals. The Metropolitan Health Bill alone deserves the support of the profession of this city and Brooklyn.

THE WEEK.

Our readers cannot fail to notice that the Homœopathists are actively engaged in petitioning Congress to recognise Homœopathy in the Medical Staff of the Army, and to instal it in the military hospitals. Although we are not prepared to believe that Congress will commit the indiscretion of granting the prayers of these petitioners, still there are too important consequences at issue in this question for the medical profession to remain indifferent to this effort to demoralize, if not utterly destroy, the Medical Staff of the Army. We have assurances from responsible persons that individual members of Congress, who are jealously guarding the public interests, desire that this effort to legislate quackery into the army, should be promptly counteracted by the medical profession. The legitimate method of accomplishing this object is by remonstrances against legislative prescription of any special systems of practice in the Medical Staff of the U. S. Army. The Academy of Medicine of this city, it will be seen, has taken prompt action in the matter, and we urge all state and local societies to do likewise. In addition let individual practitioners throughout the country forward, at once, remonstrances, signed by the citizens of their locality, to their representatives in Congress.

At a special meeting of the New York Academy of Medicine, held January 29, 1862, Dr. James Anderson, President, in the chair, the following letter, directed to the President, was received from Dr. Valentine Mott.

Sir:—We have all been annoyed with the intimation that the noble Surgical Staff of our Army might be polluted with Homœopathy. We all honor the regular profession, and when an attempt is made to impair its usefulness, or detract from its dignity, we should promptly and unitedly repel it.

Influenced by these sentiments I forward to you the accompanying resolutions, and beg you to introduce them at the meeting this evening, as coming from me. A broken metacarpal bone prevents my presenting them in person.

Yours truly,

Valentine Mott.

1 Grammercy Park, Jan. 29, 1862.

"*Whereas:* Petitions have lately been presented to the Senate and House of Representatives of the United States, for the employment of Homœopaths as Surgeons in the Army; therefore,

"*Resolved:* That the New York Academy of Medicine deem it their duty in the interest of the Army, respectfully to protest against the employment of such practitioners, for the following reasons:—

"*1st.* That the practice wherever subjected to accurate observation has failed to establish itself in any hospital.

"*2d.* That in the countries where it originated and attained its fullest degrees of development, it has not been introduced into the army or navy.

"*3d.* That it is no more worthy of such introduction than other kindred methods of practice as closely allied to quackery.

"*4th.* That such appointments would dissatisfy and dishearten the Medical Staff of the Army, who understand the true character of Homœopathy, and who have entered the service of their country, with confidence that the Government would strive to elevate the standard and promote the efficiency of the Medical Staff—results surely to be defeated by the appointment of Homœopaths.

"*Resolved:* That a copy of the above resolutions be sent to the Hon. Ira Harris, of the U. S. Senate, and the Hon. F. A. Conkling, of the House of Representatives, with a request that the resolutions he presented to the two Houses of Congress."

The resolutions were supported by Dr. Van Kleek, Dr. E. Harris, Dr. Joseph M. Smith, and Dr. Isaac Wood, in brief, but earnest and forcible speeches, and were then unanimously adopted.

On motion of Dr. Adams, the delegates to the State Medical Society were instructed to bring the subject before that body, at its meeting at Albany, on Tuesday next.

—

By the kindness of the Surgeon-General of the State of New York, Dr. S. Oakley Vanderpoel, of Albany, we are able to give a list of the Surgeons appointed to Volunteer Regiments in this State, since Dec. 1, 1861, with the changes that have occurred in the regiments in the field, since that date. This information will prove of great interest to the profession of the State. Hereafter, through the favor of the Surgeon General, we shall give weekly reports of these changes.

—

Dr. Morton, the alleged discoverer of ether, has at length commenced prosecutions for infringement of his patent. The first Institution summoned to answer was the New York Eye Infirmary, in the U. S. Circuit Court, in this city, Judge Shipman presiding. After taking some medical testimony, the case was arrested by the Judge, for the present term, who doubts the validity of the patent.

—

The following delegates to the N. Y. State Medical Society, were chosen by the Academy of Medicine, Drs. John W. Green, O. White, Jared Lindsay, and J. P. Garrish.

Reviews.

TEN LECTURES INTRODUCTORY TO THE STUDY OF FEVER. By ANDREW ANDERSON, M.D., Lecturer on the Practice of Medicine in Anderson's University, Glasgow. London. 1861. Pp. 180.

(*Continued from page* 58.)

THE fourth chapter, which may be said to introduce the second part of the work, opens with a classification of fevers preparatory to treating of the individual fevers.

We must content ourselves with gleaning here and there a quotation of interest.

Diagnosis of enteric and typhus fever:

"It [enteric fever] differs from typhus in this—that it attacks younger people, mostly from twenty to thirty, but very rarely those above fifty; whereas, as we saw yesterday, typhus may attack those of almost any age. Again, its mode of invasion is different. That of typhus is for the most part sudden: begins with vigor, and prostration supervenes at once. The fever of which we now speak begins gradually and insidiously; so much so that the patient may for some days persuade himself that there is nothing the matter with him. * * * Again, the whole aspect of a person laboring under enteric fever is distinct from that of one in typhus. There is not the stupid, oppressed look, which I endeavored to deseribe to you yesterday as belonging to that disease; there is rather languor, prostration, and indifference to everything; or if there be delirium, it is by no means constant; it is of a milder kind; there is more wandering than confusion. The countenance, too, is different: there is a partial flushing of the checks, with pallor of the other parts of the face, which you never see, I think, in typhus; and the pulse is variable, corresponding with the variable state of the nervous system. The eruption likewise is peculiar: it appears, not on the fifth day, as in typhus, but from the seventh to the twelfth—is not diffused over the whole body, but confined to the epigastrium and abdomen—is not copious, but consists perhaps of but from six to twelve spots. These are slightly round and of a pale rose color. * * * The duration of the malady is greater than that of typhus."

Treatment of enteric fever with reference to the local lesions:—

"The medicines required in these cases ought to be given always with reference to the irritated state of the bowels. Never, although there be diarrhœa, pour into the stomach coarse astringents, such for instance as chalk mixture, tincture of catechu, and so on. Remember that you have to deal with a mucous membrane in an irritated, angry state, ulcerated in all probability, the ulceration perhaps on the point of penetrating through the gut: be cautious therefore; let your remedies be of small bulk, and in as mild a form as possible. You will find that the acetate of lead is a very useful remedy, soothing the irritation, and acting as a mild astringent. Small doses of tannin are beneficial; it may be given in pills made up with a little glycerine, and works to the like good effect. Sulphate of copper in quarter grain doses may be given in similar cases, combined with a very little opium; for I think you will find it advantageous to give small opiates, as long at any rate as there is diarrhœa. Never, however, give opium in such quantity as to lock up the bowels—but only to soothe and check their peristaltic action."

From the quotation given in regard to the treatment of the stage of incubation it might be thought that the author has given in his adhesion to a certain school of latter-day therapeutists not renowned for active antiphlogistic treatment. That his treatment of that stage does not arise, however, from any preconceived notions or prejudices, will be seen by the following remarks on bleeding and mercury in post-febrile ophthalmitis:—

"We learned very important lessons from the treatment of this ophthalmia—lessons which tell against some of the theories which are fashionable at the present day. The previous fever and the actual debility of the patients made me at first eschew anything like depletion; but we found in the failure of other means that bleeding was the most effectual—the only effectual—mode of cutting short this dangerous ophthalmia. We took blood from the arm; the drawing of two ounces was in some cases sufficient to make the patient faintish; but by that small loss we gained our object as we could not attain it by leeching, even to much more copious effusion of blood; it had, I am perfectly satisfied, an effect which no other mode of treatment could have produced—the effect of arresting the inflammation which would soon have destroyed the eye, as amply proved to us by the result of neglected cases. * * *

"The next lesson which we learned from these cases was that mercury was the only trustworthy drug in this disease. Again and again, in tens and scores of cases did we observe, that just as the system became affected by the medicine, just as the gums were touched, the eye, which had till then shown no symptoms of improvement began to get well. The dogma that mercury is of no avail in the treatment of inflammation, is, in my opionion, a dogma as pernicious as it is unfounded; nay even asthenic inflammations, provided only they be of an adhesive nature, like those of serous membranes, and provided the vital power be maintained by sufficient nourishment, are overruled by mercury as by no other agent. * * * Do not, I beseech you, be seduced into believing that inflammations ought to be left to nature's curing, or that bleeding and mercury are worse than useless in treating. Neither bleeding nor mercury is useful in *all* inflammations, nor in every inflammation at every stage; but the notion that they are *never* beneficial took its origin with those who are more disposed to theory than conversant with practice; and who, dealing principally with advanced cases admitted into hospitals, got into the way of thinking of the inflammation as if it were identical with its own products; defining it by describing the changes of structure which it produces; forgetting that there is such a thing as arresting an inflammation *before* these changes occur; and shutting their eyes to the positive clinical proof that the disease may be checked, and the absorption of the effusions promoted, by the agencies of which I have been speaking."

Many other passages we had marked as worthy of selection. But we have undoubtedly given enough to show the manner of the man, and the nature of his work. We feel assured that no student can master its contents without great benefit, and no practitioner arise from its perusal without wishing, as we did, for "more."

J. C. R.

Correspondence.

FOREIGN CORRESPONDENCE.

PARIS.

LETTER FROM C. Y. SWAN, M.D.

Nov. 28th, 1861.

THE excitement and confusion attendant upon commencement occasion having now quite subsided a different state of things is presented. Instead of the riotous conduct, etc., to which I alluded in my last letter, everybody has now a business air. Each professor is punctually at his post, each student has in hand his note-book, the janitor his time-piece, and so once more the machinery of this immense school moves quietly along. As it may possibly interest some readers to hear something more pertaining to it, I beg leave to present them with the following very hurried glance at a few of the most prominent of the faculty.

But before giving such, let me state that there are in France sixteen academies, and besides primary schools all have faculties either of medicine, law, literature, or sciences. These academics are governed by a body of *savans* chosen by the Emperor, and termed the *Conseil Imperial de l'instruction publique*. The academy of Paris consists of five faculties—sciences, letters, medicine, theology, and law. There are but three *superior* schools of medicine—Paris, Montpelier, and Strasbourg; the others are called secondary or preparatory, as at Tours, Dijon, Lyons, etc.

To gain a professorship in former times the ordeal of *concours* had to be passed, but *on dit* that the present Emperor, in order to favor a favorite (Jobert), did away with this trying ceremony, and decreed that all in future should be his appointees. The faculty of Paris is composed of the dean, twenty-six professors, and twenty-four *professeurs agrégés*.

The latter are all hard working young men, and Majesty

in this instance makes no exemption; they attain their position by competition. Of course they have higher aspirations, and in the event of any of the professors being absent from sickness or other causes the vacant chair is temporarily filled by one of them. Their field of labor is at the *école pratique*, and their salaries vary from $400 to $1600 per annum. *It is to these men mostly that the honor of progress is due.*

Deducting the nine clinical professors, who, understand, hold forth *only* at their respective hospitals, from the twenty-six in all, leaves sixteen to fill the various chairs at the Ecole de Médécine. Of course all these cannot lecture at one session, for the school is only open seven hours per day, and each hour is taken up as indicated by the following programme of the Winter session:

Subject.	Professors.	Days and Hours.
Physique médicale.	Gavarret.	M., W., F., 11 A.M.
Pathologie médicale.	Natalis Guillot.	" " " 3 P.M.
Operations et appareils.	Malgaigne.	" " " 4 P.M.
Chimie médicale.	Nurtzy.	T., Th., S., $10\frac{3}{4}$ A.M.
Anatomie.	Jarjarvay.	" " " 12 M.
Path. et therap. générale.	Andral, by Axenfield, *agrégé*.	" " " 3 P.M.
Path. chirurgicale	Denonvilliers.	" " " 4 P.M.

Those Professors not here noted will take their places in March, and carry on the spring session.

The clinical professors are distributed as follows:

Subject.	Professors.	Hospital.	Days.
Clinique médicale.	Bouillaud. Piorry. Trousseau. Rostan.	à la Charité.	Every morning from 7 to 10 o'clock.
Clinique chirurgicale.	Lauzier. Jobert de Lamballe.	à l'Hotel-Dieu.	
	Velpeau.	à la Charité.	
Clinique d'accouchements.	Nélaton. Dubois.	à l'Hopital de la Faculté.	

The most attractive lecturer at the college is certainly Malgaigne on operations and apparatuses. The speciality is admirably fitted for him as permitting of digressions into witticisms of the most bitter nature against inventors in general, and old Charrière in particular, who, by the way, is generally alongside. He is certainly the grand leveller. Few operations or instruments are better than blunders, his own excepted, and these invectives are uttered so eloquently, so beautifully sarcastic, that his hearers fail not to evince their appreciation in applause frequent and sincere. Many of the audience are non-professional, mere listeners indeed, who have no interest other than to hear the irony and watch the grimaces of this most peculiar speaker. He has such a crabbed appearance, and the contortion of his features as he is upon the point of saying something severe is so singular and unnatural, as to be comparable only to the face of a snarling dog. A student ignorant of the language can tell when he bites. As a debater he is powerful and fearless, and in the meetings of the Academy of Medicine invariably puts down his antagonist.

Denonvilliers is perhaps the next most popular as a lecturer, and it must be by reason of his very oppositeness to his colleague, for no two men were ever more different than Denonvilliers and Malgaigne.

Jarjarvay makes the hour pass pleasantly, notwithstanding the difficulty of his subject.

From among the clinical professors Trousseau must be chosen as the true orator. Indeed this ought to be his forte, for in early life, besides being a legislator, he was professor of rhetoric. Few men are more admirable for both talent and exterior looks. In manner and appearance he reminds me greatly of Dr. Willard Parker.

Jobert de Lamballe is surgeon to the Emperor, and is besides as unfeeling as a Maisonneuve. He seems never pleased, for ever growling at his aids, doing everything but kicking them, and patients in his wards are scolded at like dogs.

What a contrast is the gentle Nélaton! All mildness with his assistants, and showing extreme sympathy for the sick. The largest *clientèle* lies between him and Trousseau. I am told that Nélaton's income is about 200,000 francs.

Velpeau has been now so long walking the wards, and so long famous, that to foreigners in particular he has become a perfect old curiosity. He is about the first one that the American student just arrived asks to be shown to. In a recent visit to Tours I understood that his studies were begun there, but so long ago that the oldest doctor did not remember. He has more internes and externes under his care than any other, especially of Spaniards. The crowd after him is so large that it is nearly impossible to see more than every fourth bed. He is familiar and kind to every one.

Piorry is called a great oddity with two great hobbies—the making of new sounds by his fingers, and new names with his tongue. For those who have faith to the very finest point in percussion he must be their king. As an instance of his perfection I may mention that I have known him to percuss the spleen some few hours after giving quinine, and detecting a diminution of its volume! He uses simply the pleximeter, to which he has given some new name which I forget. While percussing he never listens, at least scarcely ever. The *tactus eruditus* is upon his fingers, so that the slightest abnormality is at once perceived by them, and simultaneously, uninterruptedly, he announces to his followers the precise condition of the organ in question. His class is only moderate in size, and mostly made up of foreigners. I heard Maisonneuve once say that Piorry could detect and describe a clot beneath the cranium.

Bouillaud is no doubt a little vain of his resemblance to the first Napoleon. For my part I could never see it: but one thing is pretty certain, that is, although a physician he has spilled more blood than any surgeon in Paris. What does Bouillaud do? Bouillaud bleeds.

In conclusion, this sketch of the faculty, I am well aware, is too brief to be perfect. Written without research, I have merely jotted down the facts uppermost in my mind. Many others are well worthy of notice, but these few are the professors that I have followed most, and consequently with whose peculiarities I have become most familiar.

It pleases me to be able to state that I have added the following Parisian journals to the exchange list of the MEDICAL TIMES: L'Union Médicale; La France Médicale; Le Courrier Médicale; Archives de Médicine; La Revue Therapeutic Médico-Chirurgicale; Gazette Hebdomadaire; Moniteur des Sciences; and Le Bulletin Therapeutic.

Army Medical Intelligence.

LIST OF THE NAMES OF SURGEONS APPOINTED TO THE VOLUNTEER REGIMENTS OF THE STATE OF NEW YORK, SINCE DECEMBER 1, 1861, AND THE CHANGES WHICH HAVE OCCURRED IN THE REGIMENTS IN THE FIELD FROM THE SAME DATE.

Dec. 3, 1861.—James C. O'Neil, M.D., Assist. Surgeon 5th Regt., Irish Brigade, since changed to Artillery Regt. Dec. 4.—Elbridge G. Seymour, M.D., Assist. Surgeon, Sacketts Harbor, 94th Regt. Dec. 6.—E. B. Berky, M.D., Surgeon 12th Militia. Dec. 10.—Robert Morris, M.D., Surgeon 91st Regt.; D. S. Landon, M.D., Surgeon Col. Viele's Regt. stationed at Troy. Dec. 12.—Lawrence McKay, M.D., Surgeon 6th Regt., Cavalry; John B. Cooper, M.D., Surgeon 5th Regt., Cavalry; Lucian P. Woods, M.D., Assist. Surgeon 5th Regt., Cavalry; Riland A. Weed, M.D., promoted from Assist. Surgeon 17th Regt., to Surgeon 25th Regt., vice S. N. Fiske, resigned; Lewis Tice, M.D., Assist. Surgeon 17th Regt., vice Riland A. Weed promoted. Dec. 13.—Henry Hewitt, M.D., Surgeon 92d (Potsdam) Regt.; Thomas Bradley, M.D., Surgeon Irish Regt., organizing at Rochester. Dec. 14.—Charles S. Goodrich, M.D., Surgeon "Van Buren Light Infantry," organizing at New York; William H. Wiser, M.D., Assist. Surgeon 2d Regt. Artillery, vice Spencer H. Brown, resigned; Robert Treat Paine, M.D., Jr., Assist. Surg. 28th Reg. vice Matthew F. Regan, M.D., discharged. Dec. 17.—G. J. Fisher, M.D., Surgeon of 3d Regt., Eagle Brigade, organizing at Sing Sing. Dec. 18.—Strowbridge Smith, M.D., Surgeon 93d Regt., (Washington Co. Regt.), stationed at Albany. Dec. 18.—Meigs Case, M.D.,

promoted from Assist. Surgeon to Surgeon 43d Regt., vice J. Harry Thompson, M.D., promoted to Brigade Surgeon. Dec. 17.—Andrew H. Smith, M.D., Assist. Surgeon 43d Regt., vice Melgs Case promoted; Spencer S. Sloat, M.D., Surgeon 95th Regt., in process of organization at New York. Dec. 20.—T. C. Wallace, M.D., Assist. Surgeon 93d Regt. (Washington Co. Regt.), stationed at Albany. Dec. 21.—Morris W. Townsend, M.D., Surgeon 47th Regt., vice Whitman V. White resigned; E. Vandrey, M.D., Surgeon "Enfans Perdus," in process of organization at New York; Frederick Wolf, M.D., Surgeon 89th Regt., vice Leopold Zander resigned; William H. Hall, M.D., Assist. Surgeon 36th Regt., vice Louis D. Radginsky resigned. Dec. 23.—Charles Goodale, M.D., Surgeon 94th Regt., in process of organization at Sacketts Harbor. Dec. 26.—Brower Geesner, M.D., Assist. Surgeon 88th Regt., vice Stephen Griswold deceased. Dec. 27.—David B. Dewey, M.D., Assist. Surgeon 84th Regt. (14th Militia). Dec 28.—George S. Dilts, M.D., Surgeon "Jackson Artillery," organizing at New York.

Jan. 8, 1862.—A. H. Whitford, M.D., Surgeon 99th Regt., "Union Coast Guard," vice Johnson Clark, M.D., deceased. Jan. 6.—George Bayles, M.D., Assist. Surgeon "Col. Donbleday's Regt., Heavy Artillery." Jan. 14.—L. J. Marvin, M.D., Assist. Surgeon of Regt. forming at Rome. Jan. 16.—Charles J. Kipp, M.D., Assist. Surgeon "Mulges Artillery;" Julius A. Skilton, M.D., promoted from Assist. Surgeon 30th Regt., to Surgeon 87th Regt., vice Warren Cleveland, M.D., resigned; Fowler Prentice, M.D., Assist. Surgeon 30th Regt., vice Julius A. Skilton, M.D., promoted. Jan. 17.—William Q. Mansfield, M.D., Assist. Surgeon 92d Regt., organizing at Potsdam; August Hermann, M.D., Assist. Surgeon 29th Regt., vice Chas. H. Osborne, M.D., resigned. Jan. 18.—Eli Samuel Ruggles, M.D., Surgeon 99th Regt., "Union Coast Guard." Jan. 20.—R. B. Berky, M.D., Surgeon "Col. Donbleday's Regt., Heavy Artillery," (transferred from 12th Militia. Jan. 28.—J. E. McDonald, M.D., Surgeon 79th Regt., vice Dr. Norval on parole. Jan. 24—T. Lewis Hedler, M.D., Surgeon of Regt. organizing under Col. Egleffstein at New York; James L. Farley, M.D., promoted from Assist. Surgeon to Surgeon 84th Regt. (14th Militia), vice J. M. Homiston, M.D., on parole.

—

Dr. R. B. McCay, Brigade Surgeon, formerly in charge of the General Hospital at Fortress Monroe, from which he was relieved at his own request, has been appointed Post Surgeon, and is now in charge of the Post Hospital, in place of Dr. Cuyler.

STATISTICS OF DISEASES AT FORTRESS MONROE.

[Army Correspondence of the American Medical Times.]

Fortress Monroe, Va., Jan. 14, 1862.

I am permitted to place at your disposal the following, from the reports of the several Surgeons of this Division of the Army, for the month of Dec., 1861.

There were 12,215 enlisted men, and 503 officers, reported on the last day of December. There were 2783 taken sick during the month, of whom 32 were sent to the General Hospital for treatment; 2087 were returned to duty; 25 received furlough; 74 were discharged from service; 27 died; and there remained 288 sick, and 653 convalescent.

The diseases were, of fevers, 11 cases of continued; 207 of intermittent; 130 of remittent; and 105 of typhoid. There were 3 cases of erysipelas; 99 of rubeola; 2 of variola; 3 of varioloid; 2 of cholera morbus; 35 of colic; 100 of constipation; 268 of acute diarrhœa; 4 of chronic diarrhœa; 45 of dysentery; 47 of dyspepsia; 18 of gastritis; 1 of chronic hepatitis; 16 of icterus; 1 of peritonitis; 1 of splenitis; 52 of tonsilitis; 8 of asthma; 201 of acute bronchitis; 16 of chronic bronchitis; 318 of catarrh; 6 of hæmoptysis; 7 of laryngitis; 9 of phthisis pulmonalis; 12 of pleuritis; 7 of pneumonia; 8 of angina pectoris; 1 of varicocele; 1 of apoplexy; 15 of cephalalgia; 1 of cerebritis; 5 of epilepsy; 1 of irritatio spiualis; 1 of mania; 16 of neuralgia; 1 of paralysis; 3 of syphilitic bubo; 19 of gonorrhœa; 7 of ischuria et dysuria; 1 of nephritis; 15 of orchitis; 4 of stricture of urethra; 4 of primary syphilis; 10 of consecutive syphilis; 1 of anasarca; 1 of hydrocele; 24 of lumbago; 132 of acute rheumatism; 34 of chronic rheumatism; 19 of abscess; 2 of anthrax; 6 of paronychia; 19 of phlegmon; 26 of ulcer; 3 of burns; 38 of contusion; 5 of fracture; 4 of hernia; 2 of luxation; 27 of sub-luxation; 47 of incised wound; 30 of contused and lacerated wound; 6 of punctured wound; 9 of gunshot wound; 2 of amaurosis; 20 of ophthalmia; 3 of otalgia; 5 of otitis; 3 of otorrhœa; 52 of debility; 22 of hæmorrhoids; 12 of morbi-cutis; and a few others of no importance.

Of the 27 deaths, 14 occurred at the General Hospital. The diseases were, from typhoid fever, 15; capillary bronchitis, 3; typhoid pneumonia, 2; double pneumonia, 1; cerebro-spinal meningitis, 1; rubeola, 1; cerebritis, 1; apoplexy, 1; epilepsy, 2; enteritis, 1; and 1, the disease not given.

The weather during the month was very fine, like early Autumn in the more Northern States, except that it was not so cold. From the Register I take the following:—There were during the month 25 fair days, and 6 cloudy, 2 of rain, and one, it snowed a very little. The mean temperature for the month was 46°, maximum, 63°, minimum 30°.

The regiments at Camp Hamilton and Newport News, except those provided with houses in which to treat their sick, have built hospitals for themselves of logs, which they bring from the woods—the crevices between the logs filled with clay—for the roof, U. S. provides them with boards. They are 18 feet by 30, and make very comfortable quarters for the sick.

I hear no complaints among the medical officers, except, that too much physic, and *too little surgery* is required of them.

J. W. Hunt,
Surgeon, 10th Reg. N. Y. V.

Medical News.

Medical Society of the State of New York.—The "Times" will be before its readers in season to remind them of the meeting of the Medical Society in Albany, on Tuesday, Wednesday, and Thursday of next week. The New York County Society is entitled to seventeen delegates, New York Academy of Medicine to five, four Medical Colleges each one, Kings County Medical Society to seven, and Long Island College Hospital to one, making from New York and Brooklyn, thirty-four delegates. How many of this number will be present? Let the answer be creditable to the profession in both cities. Everything promises favorable for an interesting meeting. The address by Dr. E. H. Parker, on Wednesday eveuing, will doubtless be able, eloquent, and patriotic. The Society will be entertained by the Surgeon-General, and Dr. Swinborne.

Benj. E. Bowen, M.D., Chairman of the Committee on Medical Societies and Colleges of the Assembly of this State, is an able and accomplished physician, from the county of Oswego; his residence being Mexico. It is fortunate for our profession that the chairman of this committee has always been one of the best representatives.

Dr. Gurdon Buck has resigned the post of Surgeon to the New York Eye Infirmary, and Dr. F. J. Bumstead, late Assistant Surgeon, has been appointed to fill the vacancy.

Death of Dr. Daniel Brooks.—At a meeting of the Kings County Medical Society, convened on account of the death of Dr. Daniel Brooks, late President of the Society, the following resolutions were unanimously adopted:

Whereas, In the dispensation of Providence, our friend and fellow member, Dr. Daniel Brooks, late President of this Society, has been removed by death, therefore be it

Resolved, That while we recognise the wisdom and goodness of God in all His ways, and bow in humble submission to his inscrutable decrees, we cannot but deplore the loss of one who was endeared to us in all his social and professional relations, and for whose manly and ingenuous character we had an unqualified respect.

Resolved, That the warmest sympathy of this Society is felt for the family who so suddenly and under such peculiarly trying circumstances have been deprived of a husband and father.

Resolved, That the Society attend the funeral of our brother in a body, wearing the usual badge of mourning.

Resolved, That a copy of these resolutions be sent to the family of the deceased, entered on the minutes of the Society, and published in the Brooklyn papers, and the American Medical Times.

John G. Johnson, M.D., *Secretary.*

MARRIED.

LANING—TOUCEY.—January 12, 1862, in Zion Church, McLean, W. N. Y., by the Rector, the Rev. C. S. Percival, A.M., OLIVER LANING, M.D., and Miss SABINA JANE TOUCEY—all of McLean.

PUBLICATIONS RECEIVED.

On the Animal Substances employed as Medicines by the Ancients. By G. J. Fisher, A.M., M.D., of Sing Sing, N. Y.

A System of Surgery; Pathological, Diagnostic, Therapentic, and Operative. By Samuel D. Gross, M.D., Professor of Surgery in the Jefferson Medical College of Philadelphia, etc., etc. Illustrated by twelve hundred illustrations. Second edition, much enlarged and carefully revised, in two volumes. 1862.

Eighth Registration Report of Rhode Island. 1860.

TO CORRESPONDENTS.

Communications are on file for insertion from Dr. Chas. W. Rawson, Surgeon to the 5th Iowa Reg. Vol.; Dr. William O'Meagher, Surgeon to the 37th Reg., N. Y. Vol.; Dr. James Bryan, late Surgeon to the Cameron Dragoons; Dr. Geo. W. Willison, Fort Michigan, Va.

Revaccination.—I find revaccination successful in many instances where there is a well defined cicatrix from former vaccination. I have, in one instance, seen the variolous eruption appear after the vaccine vesicle was fully and perfectly formed upon a person who had had in childhood the cow pox, contracted direct from the cow, and who has perfect and well formed cicatrices about the wrists indicative of that distemper.

O. S. C.

PHILA., JEFF. CO., N. Y.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK,

Abstract of the Official Report.

From the 20th day of January to the 27th day of January, 1862.

Deaths.—Men, 77; women, 89; boys, 119; girls, 106—total, 391. Adults, 66; children, 225; males, 196; females, 196; colored, 6. Infants under two years of age, 135. Children reported of native parents, 24; foreign, 180.

Among the causes of death we notice:—Apoplexy, 10; Infantile convulsions, 23; croup, 11; diphtheria, 14; scarlet fever, 36; typhus and typhoid fevers, 10; cholera infantum, 0; cholera morbus, 0; consumption, 61; small-pox, 14; dropsy of head, 14; infantile marasmus, 8; diarrhœa and dysentery, 0; inflammation of brain, 6; of bowels, 7; of lungs, 40; bronchitis, 7; congestion of brain, 9; of lungs, 10; erysipelas, 4; whooping cough, 7; measles, 1. 239 deaths occurred from acute disease, and 28 from violent causes. 241 were native, and 120 foreign; of whom 78 came from Ireland; 7 died in the Immigrant Institution, and 37 in the City Charities; of whom 8 were in the Bellevue Hospital.

Abstract of the Atmospberical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Jan. 1862	Barometer. Mean beight.	Barometer. Daily range.	Temperature. Mean	Min.	Max.	Difference of dry and wet bulb. Thrm. Mean	Max.	Wind.	Mean amount of cloud.	Humidity Sat'tion, 1000
	IN.	IN	°	°	°	°	°			
19th.	29.81	.30	32	30	34	1	1½	E.	10	930
20th.	29.78	.26	32	30	34	1	2	N.E.	10	930
21st.	30.00	.19	28	26	31	3	4	N.E.	10	775
22d.	30.00	.08	31	27	35	3	4	N.W.	10	780
23d.	30.00	.01	33	26	40	3	5	N.W.	9	789
24th.	30.00	.22	31	28	36	3	4	N.E.	10	780
25th.	29.47	.60	33	30	36	½	1	N.E.	10	960

REMARKS.—19th, Light rain all day, fog late P.M. 20th, Rain-storm all day. 21st, Wind fresh late P.M., with snow. 22d, Snow early A.M. 23d, Variable sky mild day. 24th, Barometer nearly stationary for the previous four days, followed by a remarkable gale, commencing with hail at 8 P.M., which continued all the night and the forenoon of the 25th, with hard rain from early A.M. to noon. Heavy rain again from 5 to 7 P.M. Amount of rain, melted snow, etc., for the week, four inches.

MEDICAL DIARY OF THE WEEK.

Monday, Feb. 3.
- NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M.
- EYE INFIRMARY, 12 M.

Tuesday, Feb. 4.
- NEW YORK HOSPITAL, Dr. Parker, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

Wednesday, Feb. 5.
- NEW YORK HOSPITAL, Dr. Cock, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Sayre, Is. Hos., half-past 1 P.M.
- EYE INFIRMARY, 12 M.

Thursday, Feb. 6.
- NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Taylor, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

Friday, Feb. 7.
- NEW YORK HOSPITAL, Dr. Parker, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Flint, half-past 1 P.M.
- EYE INFIRMARY, 12 M.
- EYE INFIRMARY, Dr. Noyes's Lecture, half-past 1 P.M.

Saturday, Feb. 8.
- NEW YORK HOSPITAL, Dr. Cock, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Wood's Clinic, 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICES.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.—*Pursuant to Statute, the Fifty-fifth Annual Meeting of the Medical Society of the State of New York, will be held on the first Tuesday of February next (Tuesday, February 4th, 1862), in the City of Albany. The meeting will be held in the City Hall.*

NEW YORK COUNTY MEDICAL SOCIETY.—*The Stated Monthly Meeting of this Society will be held at the College of Physicians and Surgeons, corner of Fourth Avenue and Twenty-third street, on Monday, 3d inst., at 7½ o'clock P.M. Medical intelligence to be communicated and discussions to be held.*

NEW YORK ACADEMY OF MEDICINE.—DR. I. E. TAYLOR *will read a paper on the* NON-*Shortening of the Neck of the Uterus up to full term of pregnancy, illustrated with diagrams of the different views entertained on the subject, on Wednesday evening, February 5th. After which,* DR. J. BYRNE *will read a paper on "Pelvic Hæmatocele."*

Wade & Ford are now manufacturing DR. JOSEPH H. VEDDER'S walking splint for Morbus Coxarius.

Wanted, by a young Physician, a situation with an old practitioner, or any one who has more practice than he desires to attend to, with a view to purchase an interest or the whole of same business. Or would purchase a physician's practice after giving it a trial, and becoming satisfied of its worth.
Address PHYSICIAN,
Care of BAILLIERE BROTHERS,
440 Broadway, New York.

Rensselaer Polytechnic Institute,
Troy, N. Y.—The seventy-sixth semi-annual session of this Institution for instruction in the Mathematical, Physical, and Natural Sciences, will commence Feb. 19th, 1862. A full course in Military Science is now in progress.
Further information, with the Annual Register, can be obtained of PROF. CHARLES DROWNE, Director.

Sent Free by Mail on Receipt of Price.
A Treatise on Diseases of the Joints, by Richard Barwell. 8vo. London, 1861. $3.75.
BAILLIERE BROTHERS, 440 Broadway.

Sent Free by Mail on Receipt of Price.
A Practical Treatise on Military Surgery. By FRANK HASTINGS HAMILTON, M.D., author of a Treatise on Fractures and Dislocations, Surgeon-in-Chief to the Long Island College Hospital, Surgeon to the Bellevue Hospital, New York, Professor of Military Surgery and of Diseases and Accidents incident to Bones, in the Bellevue Hospital College. 8vo. Price, $2 00.
This work embraces a consideration of the Examination of Recruits, the Hygiene of Troops, relating to Diet, Dress, Exercise, &c.; Accommodation of Troops in Tents, Huts, Barracks, &c.; the Construction and Location of Hospitals; Preparations for the Field; Flying Ambulances, Litters, &c., also, Gunshot Wounds, Amputations, Hospital Gangrene, Scurvy, &c. United States Army Regulations, with many other matters pertaining to Military Surgery.
BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.
Ten Lectures Introductory to the Study of Fever, by A. Anderson, M.D. Post 8vo. London, 1861. $1.55.
BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.
A Treatise on the Surgical Diseases of the Eye. By H. HAYNES WALTON. Second Edition, 8vo. London, 1861. $4.35.
BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.
Operative Surgery, adapted to the Living and Dead Subject, by C. F. Maunder, M.D. 12mo. London, 1861. $1.87.
BAILLIERE BROTHERS, 440 Broadway, N. Y.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians (principally country Physicians) Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bonrbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gloten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyosciamus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is daily attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.
By SAMUEL R. PERCY, M.D.,
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE III.

AURUM.—GOLD.

Gold and its Compounds.

Gentlemen:—Gold has been known from the earliest ages of antiquity; by the Alchemists it was termed *Sol* or Rex Metallorum. It is one of those elements which, in its metallic state, physicians as a class are too little acquainted with; that we may grow more familiar with its virtues and powers, let us study intimately the medicinal effects of its compounds upon the human system.

The compounds of gold have been introduced into medicine during the present century, and will therefore come within the range of "New Remedies." Metallic gold in a state of very fine division has long been used in medicine. Dr. Pitcairn used it in 1715, and recommended it as superior to mercury in the treatment of syphilitic disease.

We will first give you brief and concise methods for the preparation of the medicinal compounds of gold; we will afterwards speak of their therapeutical uses.

Pulvis Auri is prepared by rubbing gold leaf to a very fine state of division with sulphate of potash, sifting, and then washing away the sulphate of potash with boiling water. It is also prepared by precipitating the gold from its terchloride with protosulphate of iron; the precipitate is washed with water, and with dilute nitric acid. In the latter there is generally a small amount of oxide of gold.

Auri Peroxidum.—This preparation is called by different names, as teroxide, peroxide, auric oxide, and auric acid. Its composition is AuO_3. It is prepared by adding one part of chloride of gold to forty parts of water, and then boiling with four parts of calcined magnesia; the precipitate is washed with water, and with dilute nitric acid. When anhydrous it is of a brown color; the hydrate is a reddish yellow. It is readily reduced to the metallic state by heat, or by the sun's rays. It is insoluble in water, but is soluble in hydrochloric acid, forming terchloride of gold; it is also soluble in the alkalies, with which it forms compounds called aurates.

Auri Perchloridum is prepared by dissolving gold in three times its weight of nitro-hydrochloric acid with the aid of moderate heat. The solution is evaporated nearly to dryness until vapors of chlorine begin to be disengaged, it is then allowed to crystallize. It is in small crystalline needles of an orange red color, inodorous, and having a strong, styptic, caustic, and disagreeable taste. It is necessary to keep it in closely stopped bottles, as it is very deliquescent. It is soluble in water, alcohol, and ether. It is decomposed by most of the metals, by phosphorus, protosulphate of iron, charcoal, sugar, gum extractive, tannic and gallic acids. It stains the skin a purple color.

Sodii Auro-Terchloridum.—Auro-terchloride of sodium is prepared by dissolving eighty-five parts of terchloride of gold and sixteen parts of chloride of sodium in a small quantity of pure water. The solution is evaporated and allowed to crystallize. It crystallizes in orange-colored elongated prisms, which are permanent in the air, and soluble in water.

Auri Iodidum is prepared by adding a solution of iodide of potassium to a solution of terchloride of gold, as long as a precipitate is produced. Double decomposition takes place and iodide of gold and iodine are precipitated, which, when washed with alcohol to remove the excess of iodine, is of a greenish yellow color. It is insoluble in cold water, but is soluble in alkaline solutions.

Auri Percyanidum is prepared by adding a solution of pure cyanide of potassium to a neutral solution of terchloride of gold, until a precipitate ceases to be formed. It is a yellow powder, which is insoluble in water.

We have spoken of the arsenate of gold under the head of Arsenious Acid.

Therapeutical Uses.—Gold in a minute state of division has been used by many of the European physicians, but so far as my knowledge goes has been but little used in this country. I have known one instance of its administration with favorable results:—An officer of a ship had contracted syphilis in Paris the night before his departure; he was told by a French gentleman on the ship, that powdered gold would cure him better and quicker than mercury. On his arrival in this port he placed himself under the care of a quack, who salivated him to a fearful extent. At this state he got ten grains of gold leaf, rubbed it up very finely with sugar, and took the whole at a dose. Within twenty-four hours the painful accompaniments of his salivation had disappeared, the syphilitic ulcer had healed, his appetite had greatly improved, and he said he felt as well as ever except the fœtor of his breath. He repeated the same dose twice afterwards with no ill effects, and he said with marked improvement in his health and spirits. He was strongly tinctured with several of the modern isms of the day, and attributed the beneficial results he experienced from the gold to its forming an amalgam with the mercury in the system and thus removing it. He reversed the doctrine of the old alchemists, and sent the nobler metal in search of the baser. This is a much larger dose than is usually administered; from one-quarter to one grain, three times a day, being the dose usually recommended.

Of the salts of gold, the oxide is the mildest, and the chloride the most active. If the theory, so earnestly stated by Mialhè, of the conversion of the mild chloride of mercury into the corrosive chloride in the intestines were true, there would be infinitely more room here for asserting that the oxide of gold had no action upon the system, and that its effects were entirely owing to its becoming a soluble chloride in the system. This change would undoubtedly take place with greater readiness with the oxide of gold, as it is readily soluble in alkaline solutions and has great affinity for chlorine, and yet we see that much larger doses of the oxide of gold can be given than of the chloride. I have no doubt of its becoming soluble and being absorbed into the system, but it is milder when taken as an oxide than when taken as any of the soluble salts.

The oxide and various salts of gold have been extensively used by Chrestien, Niel, Gozzi, Le Grand, Magendie, and others, and several monographs have been printed at Paris on the use of the preparations of gold in syphilis. Chrestien recommended it in preference to mercurialsin the primary form of syphilis; but few now use it in the primary form. In moderate doses the salts of gold produce an increased fulness and frequency of the pulse, an improved appetite, and an augmented action of the skin. They stimulate the nervous system, increase the mental energy, and after a time produce decided aphrodisiac effects. They largely increase the secretion from the salivary glands, although they do not produce the sore mouth and the fœtor that is produced by mercury.

Dr. Chrestien thinks that the terchoride of gold is very analagous, both in its chemical composition and therapeutic effects, to the corrosive chloride of mercury, but that it acts more energetically as a stimulant though less powerfully as a sialagogue than the latter salt. Orfila, who tried experiments with it on animals, says that it acts as a corrosive, and destroys animals by inflammation of the coats of the alimentary canal, but that it has less energy than corrosive chloride of mercury.

To produce its curative action in syphilis, it is considered necessary to produce, and for a while sustain, the peculiar

state of irritation or excitation that it causes, but this state must be restrained within proper limits. Under its full curative effects there is increased fulness and frequency of pulse, augmentation of urine, saliva, and perspiration, a moist tongue, with no disorder of the bowels. If the dose is too large, and continued for too great a length of time, there is headache, gastric irritation, a dry red tongue, soreness of the fauces, griping pains in the bowels, cramps, and diarrhœa; if these are not soon controlled, there is great heat of the skin, agitation and loss of sleep, gastritis and fatiguing erections; and, from the experiments of Orfila, poisonous doses would no doubt produce much the same symptoms and results as the corrosive chloride of mercury.

The febrile action produced by the salts of gold may be more readily controlled than those produced by the salts of mercury. Free use of warm alkaline demulcent drinks will alone frequently remove all unpleasant effects, and if during the administration of the salt a febrile action is induced, it may be removed in a short time by free diluents combined with opiates.

You may frequently find these salts useful in the tertiary forms of syphilis. Iodide of potassium, as you know, is frequently used with great benefit in this form, yet there are cases where it produces very little benefit. These, in my experience, are those cases where the disease has progressed to the latter form without the use of mercury during the primary disorder, or wherein too little was used to effect a cure. In these cases the corrosive chloride of mercury in combination with the iodide of potassium, forming the corrosive iodide of mercury, or the same remedy in combination with tonics, would effect a cure; but from various causes you frequently cannot use any mercurial. In these cases any of the salts of gold (I have used the chloride and the iodide), used and maintained to their second degree of operation, have a very happy and salutary effect; but it is necessary, as it is in administering mercurials, to see your patient frequently, and closely watch the effects of the medicine, and control it within its curative operation. There are also cases where the mercurials exert no beneficial effects, and there are also times where for obvious reasons their use is contra-indicated. Here the salts of gold are often of great benefit.

These salts have been recommended as general tonics and alteratives, but as we have remedies of known powers, I have never used them for such effects.

Modes of Administration.—The oxide of gold as well as the salts have been administered by way of friction upon the inside of the cheeks and gums; by this method from a quarter of a grain to a grain of the oxide, or one-sixteenth to one-tenth of a grain of the chloride or cyanide, may be used twice or thrice daily, mixed with some inert powder, as starch or lycopodium, and rubbed for several minutes upon the tongue, cheeks, or gums. In this way it is said to produce no soreness of the gums, and no irritation of the bowels. I have never administered it in this way. Niel preferred its employment endermically by applying it over a blistered or ulcerated surface. Le Grand used the oxide in lozenges, and gives the following formula for their preparation:—Auri oxidi, gr. vj.; sacchari albi pulv. ʒj. Tere et misce, dein adde muc. tragacanthæ, ut fiat moles, in pilulas sexaginta dividenda. In this formula each lozenge contains one-tenth of a gr. of the oxide. In most of the works the various salts are recommended to be made into pills, but in my opinion they never should be made into pills. All the salts are very easily decomposed, and most of them are caustic in their local application. It is better then that they should be always fully diluted. The iodide, the cyanide, and the oxide can be taken in any of the alkaline solutions freely diluted with any pleasant flavored syrup. The chloride and the auro-terchloride of sodium are soluble in water or syrups. Any of them may also be taken in the double gelatine capsules without taste, and followed with a drink of water or any demulcent fluid.

Dose.—The dose of the oxide may be from one-quarter to one grain three times a day. The dose of the chloride is from one-sixteenth to one-eighth of a grain; of the cyanide about the same. The iodide may be taken in rather larger doses, as from one-tenth to one-sixth of a grain, and the auro-terchloride of sodium in about the same quantity.

Antidotes.—The treatment in poisoning would be much the same as for corrosive chloride of mercury.

Original Communications.

MEDICO-LEGAL POINTS IN A CASE OF SUSPECTED HOMICIDAL CUT THROAT,

AS PRESENTED AT A MEETING OF THE NEW YORK ACADEMY OF MEDICINE, HELD DEC. 18, 1861.

By A. CLARK, M.D.,

PROFESSOR OF PATHOLOGY AND PRACTICE OF MEDICINE IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

(*Continued from page* 64.)

MOVEMENTS, VOLUNTARY OR INVOLUNTARY.

Regarding the power which this woman might possess after inflicting this wound upon the throat, of passing the hand over the face, placing it in one or two spots on the pillow, and of letting it fall again in the position in which it was found, it is not inappropriate to consider two classes of facts: I. Those which relate to voluntary motion after fatal wounds have been inflicted, and II. Those that refer to convulsive and involuntary movements resulting from hæmorrhage.

On the first of these points Taylor (page 347) remarks: "There are several cases on record which show that wounds involving the common carotid and its branches as well as the internal jugular vein do not prevent the exercise of voluntary power and running a certain distance," and page 270, "Suicides do not immediately perish from wounds that are commonly termed mortal, on the contrary they have power to perform acts of volition and locomotion which might seem incompatible with their condition." Among a considerable number of instances recorded in which persons with wounds in the neck, that were almost immediately fatal, have performed such acts of volition and locomotion, two are referred to by Brierre de Boismont (*Annales d'Hygiène*, xli., page 143) who cut their throats before a mirror, walked across the room by the aid of the furniture, covering the floor with blood, and, reaching their beds, lay down and died.

In a case referred to in Beck (vol. ii., page 350), a woman in whom the left carotid artery was cut, and many branches of the carotids and jugulars, walked twenty-three yards, crossed a stile three feet ten inches high, and then died. A man afterwards found that the time required for him to do this was thirty seconds.

The case already quoted from Degranges, in which a man after cutting his own throat went to and returned from another story of the house, and with apparent great deliberation hanged himself, illustrates the same point. It is not evident in any of these cases that both carotids were cut, still they leave us to the inference even when both were cut that certain voluntary motions can be performed, and probably all that were supposed to have been performed in this case. But with reference to convulsive movements there can be no doubt that they are common in death from hæmorrhage, and more common the more rapidly fatal the bleeding. These convulsive movements are known to last as long as the bleeding continues, and analogy permits us to infer that in these cases they may have continued at least thirty seconds after the wound was inflicted.*

* For a treatise on the subject of convulsions from hæmorrhage, vide *Kussmaul* and *Tenner* (*New Sydenham Society Pub.*). See also, *Hippocrates*, *Marshall Hall*, *Medico-Chirurg. Trans.*, vol. xiii., page 126. *Travers Constitutional Irritation*, page 389. *Beck*, vol. ii., page 372.

SPRINKLING OR SPIRTING OF BLOOD.

The sprinkling or spirting of blood from wounds in the neck appears to have attracted but little the attention of medical jurists. In by far the largest proportion of cases it is not mentioned, even when the description is in great detail. In this case, however, it became a question of importance, on the theory that the woman was suffocated and that her throat was cut afterwards. It was urged that in such a case the spirting of blood would be little or none at all, while on the other hand it was claimed that if the throat was cut in full life the blood should have been thrown to a considerable distance upon the bed, and even upon the walls of the room. It was even claimed by one of the medical witnesses that a cut made in this situation, the heart being vigorous, the head in the line of the body, the body lying upon the back, that the blood would have been thrown from each carotid past the lips of the wound, past the jaws and head, and would have struck in full force against the head-board. My researches have led me to the inference that when the carotids are entirely divided the spirting or sprinkling of blood from them is almost nothing; but that when either of them has been partially divided so as to give such direction to the current of blood as that it will flow forward, unobstructed by the lips of the wound, then the jetting or sprinkling of blood may be considerable. Thus in the case already quoted from Marc, of the young man who cut his throat standing before a window, the furniture and window were spotted with blood to the height of about three feet, an overturned chair was sprinkled with blood, a night-cap on a step before the window, raised about one foot, was spotted on its upper side. In this instance neither carotid was entirely severed, both were cut into "and the right half cut, the left more than half cut."

In a case reported by Rami, Adelon, Dubois, and Boyer (*Annales d'Hygiène*, xv. 394; *Beck*, ii. 134), in which only about one pound of blood was lost, the throat was supposed to be cut while the woman was standing a short distance from a wall; the wall was sprinkled to the height of three feet four inches at one spot, and at another spot to the height of two feet six inches. In this case the right carotid was cut in two-thirds of its circumference, on its inner side.

In the case of Mrs. Duval, referred to by Beck (ii. 214), reported by Devergie (*Legal Medicine*, ii., page 168), the larynx and hyoid bone were broken, the superior thyroid artery was cut, but the carotids were not. The blood had been thrown in jets over the features, but it is not remarked that it was thrown upon the furniture. This was a case of homicidal cut-throat; the thyroid artery was enlarged to supply an enlarged thyroid gland.

In the case of Sellis, the valet of the Duke of Cumberland (*Beck*, ii.), there was a wound in the throat six inches long, dividing the arteries on both sides, whether wholly or not, is not stated. There was blood on the walls of the room, on the curtains, washstand, basin, and drawers. The body was extended in bed, but Sellis's cravat was cut in several places. On the duke were two scalp wounds, his arm was wounded, his little finger nearly cut off, and there was bloody water in the basin in Sellis's room. Under these circumstances it would seem at least questionable whether the blood upon the walls, bed, and furniture was from the arteries of the servant or the master. These are all the cases of cut-throat that I have met with in which the subject of sprinkling has been considered of sufficient importance to have been described in detail.

Taylor (page 286) makes the following statement. "The sprinkling may be expected only when the wounded artery is small, or when the blood is effused at a distance. This is a fact which medical jurists should not overlook;" but he adds that it may be accidentally sprinkled from a vein. He says also (page 277), "The hand and weapon cannot escape being marked with blood." He says also, "Sprinkling of blood, when it exists, may be evidence that it came from a living body."

BLOOD ON THE INSTRUMENT.

It is universally admitted by the authorities that in suicidal cut throat there must be a certain amount of blood upon the instrument with which the wound was inflicted, and also upon the hand that carried it; but in regard to how much of blood there should be on each, and in what relation it should be found, they are almost entirely silent. In this instance it did not appear that the blood covered the razor blade, but that it was collected in rather narrow bands and in spots upon different portions of it, a band of moderate width being described near the edge of the instrument. It was urged by the prosecution that this was an inadequate show of blood upon the weapon. By the defence it was claimed that upon a polished instrument of any kind, and especially upon a razor that had been stropped on oiled or greasy leather, blood would dispose itself as water does upon such instruments, and thus cannot be made to cover the surface uniformly, but will collect in lines and drops, much as the blood was supposed to have collected upon the instrument in this case. This is a subject, however, concerning which surgeons have the means of forming more accurate opinions than physicians. The most definite statements we find on this topic are made by Taylor. Thus (page 279) he says: "The blood on the instrument may be partly coagulated and not diffused as a mere film; this would render it probable that it had issued from a living person or animal, or from a recently dead body." Again, in the same page, he adds: "Particular attention should be paid to the manner in which the blood is diffused over the weapon. It is not unusual for a criminal to besmear with blood a knife or other weapon which has probably not been used." Thus it would seem probable, had this instrument not been used to make the wound, but obtained for the purpose of deception, as was believed by some of the witnesses for the prosecution, that the blood would not have been found collected irregularly on it, but it would, in Taylor's language, have been "besmeared" and very generally "diffused."

SUFFOCATION AND HÆMORRHAGE CONCURRING.

The fact that suffocation may occur in cut throats seems to have attracted but little attention from medical jurists, yet the fact is distinctly announced by several authorities, and is recognised in some of the reported cases. This may occur in either of two ways: by the retraction of the trachea, and its obstruction by the soft parts, or by the filling of the trachea with blood from the wound.

Briand and Chaudé (*Legal Medicine*, p. 309) state that if the trachea alone is cut, the inferior end retracts into the soft parts, the air no longer penetrates to the lungs, and death occurs from suffocation: if vessels are wounded at the same time, death is produced by suffocation and hæmorrhage.

Orfila (*Legal Medicine*, ii. 506) states, "when the trachea is completely divided, the inferior end is retracted and hidden in the neighboring parts, and the person dies of suffocation."

In the case already referred to under the head of sprinkling observed by Adelon, Dubois, Boyer, and Rami (*Annales d'Hygiène*, xv. 394) these observers all recognise the fact that the blood will flow into the trachea and cause asphyxia. It is stated in their case that the trachea was retracted one inch, and that blood was found in the air tubes and assisted in destroying life. The lungs were much engorged. In a case recited by Devergie (*Legal Medicine*, ii. 117) homicide was committed by cutting the throat with a pair of scissors. The trachea was completely divided, as was the vertebral artery. Death was produced by hæmorrhage and asphyxia, blood being found in the bronchial tubes.

In the case of the great wound already referred to, reported by the same author (*Annales d'Hygiène*, 418), it is stated that "the blood was introduced into the right bronchus only, and had penetrated into the last ramification of the tube; nothing similar was observed in the left."

In Leuret's case (*Annales d'Hygiène*, v. 236), already cited, that of the officer who cut his throat with embroidery scissors, the trachea and right carotid artery were completely divided, and the left jugular vein and œsophagus partly, and blood had penetrated into all the air tubes.

In a case of homicidal cut throat reported by Bayard (*Annales d'Hygiène*, xxxix. 433), the trachea and thyroid arteries were divided and the trachea and bronchi were filled with frothy blood, and the lungs were congested.

The fact that death may occur in this manner, and that asphyxia may play an important part in cut throats, through blood introduced in the manner here indicated, is recognised by Taylor (p. 296). He says, if in a case of a wounded throat blood should flow into the trachea, it may cause death by asphyxia. In the case under consideration, the opinion has already been expressed that blood did in this manner enter into the breathing tubes and lungs more upon the right than upon the left side; and while it is admitted that this would be a sufficient cause for engorgement of the lungs, had such engorgement really existed, the statements already made show that the quantity of blood contained in these lungs was really less than is usually found in death from common causes; at the same time it is altogether probable that these organs contained a larger quantity than if the person had died from wound of the carotid arteries without opening the windpipe.

ECCHYMOSIS OF THE TONGUE.

In nearly every instance that has been reported of suicide and homicide by wounds of the throat, the condition of the tongue has not been stated. It is more commonly referred to, and its condition described in the various forms of asphyxia. There appears to be abundant evidence of the fact that the tongue is frequently bitten when asphyxia is produced by suspension. In other forms of asphyxia, this accident does not appear to be of any particular significance or value. The opinion was expressed on the trial of this cause that biting and ecchymosis of the tongue might be the result of suffocation, but the witnesses for the prosecution failed to produce a single instance or a single professional opinion in favor of this theory, and it seems that it would be quite as natural to infer that the lesion in this case resulted from the spasmodic contraction of the muscles moving the lower jaw in the act of death as from any other cause. It is no objection to this view that both carotid arteries were cut, and that therefore the supply of blood to the tongue was in a great measure cut off, inasmuch as Christison and others have demonstrated that ecchymosis resembling that which occurs during life can be produced by violence on the dead body for about two hours after the heart has ceased to beat. Then, again, it is possible that this ecchymosis may have occurred many hours, or even two or three days before death.

Referring to the distinctive marks of hanging, Orfila (*Annales d'Hygiène*, xxvii. 143), after saying that the features, lips, and eyelids were swollen and livid, eyes red and prominent in most instances, refers to the tongue, stating that it is often but not always swollen, livid, and protruding, and adds: "If the tongue be bitten, bears marks of the teeth, and is more or less ecchymosed, this fact might give rise to the presumption of hanging."

Prof. Remer of Breslau (*Annales d'Hygiène*, iv. 178), recounting the signs of suffocation, makes the only statement that I have been able to discover which implies any relation between the biting of the tongue and suffocation. He says, regarding the tongue: "It is sometimes protruded, sometimes retracted, sometimes it is bitten in suffocation; this may be altogether unconnected with the mode of death. It is bitten or not in all kinds of death, and the fact that it is or is not bitten cannot be relied on as a sign of suffocation." This opinion, and the absence of any positive proof of the connexion here sought to be established, would seem to be quite sufficient to exclude the fact from the affirmative evidence in a trial of this sort, and attach it alone to death by suspension. The condition most commonly referred to as belonging to asphyxia from violence is congestion, not ecchymosis, and this congestion is described as having its principal seat at the root of the tongue, and not at the sides where this discoloration was noticed.

(To be continued.)

EXPERIMENTS WITH KEROSOLENE,

AND CASES OF ITS SUCCESSFUL EMPLOYMENT.

By ASA HORR, M.D.,
OF DUBUQUE, IOWA.

Having observed in the Medical Times, vol. iii., p. 61, a notice of the new anæsthetic, kerosolene, I sent to Mr. J. Downer, 76 Water street, Boston, for a sample for trial, and obtained on the 28th of August last, for the cost only of bottle and packing, one gallon of kerosolene, with the request that I should make a carcful observation of its effects and report the results. Accordingly, the following notes and remarks are submitted for publication.

Experiment I.—Was upon myself, one hour after breakfast, by applying two drachms of kerosolene to a large napkin, and inhaling it slowly and persistently until the cloth could no longer be retained to the mouth. The effects produced were nearly similar to those I had often experienced from chloroform, but with a greater feeling of buoyancy and less thrilling noise in the head, leaving no nausea nor giddiness. Half an hour after I repeated the inhalation, breathing the vapor vigorously for thirty seconds, and then ceased before any effect was perceptible. Immediately the effect began, and continued to increase during fifty seconds, when it gradually declined and in two minutes more was entirely gone, leaving a sensation or taste in the fauces and about the molars like that from the contact of two metals in the mouth, which wholly subsided in a quarter of an hour.

Experiment II.—Was with my son, nineteen years old, in good health, with the pulse at eighty per minute, who held the napkin in his own hands, with instructions to inhale vigorously until he could no longer retain the hands to the mouth. In twenty-five seconds he announced the beginning of anæsthesia. In one minute and a half from the first, the napkin fell, followed by a few bursts of langhter, then by full anæsthesia, which lasted one minute. In six minutes more he was fully recovered, and walked deliberately out of the room. The pulse during forty-five seconds remained at eighty, then increased during two and a half minutes, reaching one hundred, and during the next minute subsided to eighty, and at the end of the sitting to seventy. In other respects it was not altered from the natural standard. He observed a taste similar to the smell of gas works, and experienced a slight smarting of the fauces.

Experiment III.—Was with a healthy, stout-built man, aged twenty-two, to whom the vapor was administered very gradually, to the extent of semi-consciousness, with no unpleasant effects. The influence of the kerosolene passed wholly off in a few minutes with no marked peculiarity.

Experiment IV.—Was made just after supper upon my wife, aged thirty-seven, in feeble health from pulmonary disease. She inhaled from a napkin, in the same manner as she had often employed chloroform for pleuritic and colic pains, and came under its full influence quite as promptly and agreeably as from her accustomed anæsthetic. She objected at first to the trial, fearing so soon after a meal vomiting would be induced if it acted like chloroform. In ten minutes after waking all effects were gone, leaving the stomach undisturbed and the head quite free from the usual unpleasantness following chloroform.

At the same time I repeated the experiment upon myself, in the same manner and with like results as before. Having thus far perceived nothing to deter me from the further trial of kerosolene, I ventured cautiously upon its use with some of my patients.

Case I.—August 29th, administered kerosolene to a stout, middle-aged Irish woman, seven months pregnant, for the extraction of two teeth. Seven minutes were occupied in procuring the requisite degree of insensibility, when the teeth were removed, with no resistance, and without her knowledge. She awoke one minute after with no unpleasant consequences. When asleep, the left eye for a moment was perfectly closed, while the right stood widely open, and the hands and feet were at the same time slightly convulsed. Breathing and pulse regular all the time. Face slightly pallid during the operation. In twenty-five minutes from the first inhalation, she walked from the office quite recovered from all effects of the vapor.

Case II.—Mrs. W., aged thirty-three, healthy, about to miscarry at the third month, had morbid tenderness of the uterus, causing exquisite suffering at each regular contraction, and also great pain on touching the cervix with the finger. The membranes having previously ruptured and a serious hæmorrhage existing, artificial dilatation of the os was attempted to hasten expulsion, to which she refused to submit without anæsthesia. Kerosolene was then slowly administered to the extent of maintaining semi-consciousness for two hours, the contractions going on regularly and efficiently with the most pleasant and favorable effect. Prior to the inhalation she was restless and greatly alarmed, but after a few inspirations of the anæsthetic she became calm, and remained tranquil until delivery was accomplished, involving the forcible separation of the placenta. In half an hour she was wholly recovered from the anæsthetic, and expressed a decided preference for kerosolene over *ether*, which had been given during a regular labor three years before, which was used in large amount, attended with great mental and muscular excitement. She made a rapid and complete recovery.

Case III.—Mrs. R., aged twenty-one, in good general health, and nursing her first child, four months old, suffered severely from three carious wisdom teeth, which she desired extracted with the aid of an anæsthetic. She had often taken chloroform, always requiring a large amount, for severe neuralgic pains during pregnancy, and also at her accouchement, with uniformly good effect, except that vomiting was often induced. I decided in this case upon the use of kerosolene, and employed *one ounce* before she became insensible, occupying a period of ten minutes. On endeavoring to open the mouth found the jaws firmly closed. Just then the eyes turned obliquely upwards, the pupils were largely dilated, and the face suffused, while the arms and legs were slightly convulsed, exactly resembling a common fit of fainting. On immediately lowering the head by tilting the chair far back, the fit passed off, leaving her thoroughly etherized. One tooth was now extracted, when she instantly awoke. The kerosolene at hand being gone, chloroform was substituted, when she immediately grew pale and vomited. The other two teeth were now easily removed without her knowledge.

During the whole time of administering the kerosolene the florid tint of the face continued, and the pulse beat regularly and full. The breathing was partially suspended during the apparent syncope. No unpleasant symptoms followed the operation.

Case IV.—October 1st, Mrs. K., aged thirty-four, healthy, in labor with her sixth child, used kerosolene during one hour and a half, to the extent of maintaining partial anæsthesia; and, during the last stage of labor, occupying half an hour more, to the fullest practicable degree. It acted kindly, promptly, and in about the same quantity as is usually required of chloroform, without the least unpleasant symptom either during labor or afterwards. I administered chloroform to this lady four years ago, when delivered of twins, with like good results.

From prudential considerations I now decided upon another method of testing further the action of kerosolene, employing it in union with chloroform with *all* my cases requiring an anæsthetic; beginning with one part of the former to five of the latter, and increasing the kerosolene slightly with each successive case, until the proportion of half and half by measure was reached. In this manner the mixture has been given in five obstetrical and fifteen minor surgical cases; to three of the former and seven of the latter in the last named proportions, and in all with uniformly happy and satisfactory results.

The use of this compound appears to be attended with less disturbance of the stomach, fuller circulation in the capillaries, and less irritation of the air passages during inhalation than chloroform; otherwise, its action is precisely as if no kerosolene were added. The amount by measure to produce a given effect is but slightly greater than would be required of chloroform. An obvious advantage in favor of kerosolene is its exceeding cheapness; being afforded, it is said, at seventy-five cents per gallon.

I propose for the present to continue the use of the half and half mixture, hoping ere long to profit by the experience of others who may be inclined to report these experiments and extend their observations further than I have done.

Jan. 5, 1862.

BENEFICIAL RESULTS

FROM THE USE OF

MECHANICAL APPLIANCES IN POTT'S DISEASE OF THE SPINE.

ILLUSTRATED WITH CASES.

By JACOB A. WOOD, M.D.,

OF NEW YORK.

In the *N. Y. Journal of Medicine*, a short time previous to its change in form, a series of reports of cases of Pott's disease of the spine were commenced, the object of which was to show conclusively, that a cure in that disease did not necessarily consist of curvature, as was usually maintained; also, that the further progress of the curvature might generally be arrested from the time treatment commenced, and, in recent cases, a cure effected, with the curvature nearly or quite removed by appropriate mechanical appliances and the internal use of medicinal agents to the entire exclusion of setons, issues, or any other counter-irritant, or even the recumbent position.

In every case reported, with the exception of two, the treatment was entirely successful, not only in restoring the patient to a strong and healthy condition, but in the complete removal of the curvature, although in each case the deformity was strongly marked. Of the two exceptions, one of the patients was restored to good health without the curvature being entirely, though very nearly, removed. The other was one of long standing, and was recorded simply to illustrate the advantages of appropriate and well adjusted mechanical support in those cases where the degree of consolidation would seem to preclude all hope of benefit being received. The result in this instance was very remarkable, not only as to the improvement of the health and strength of the patient, but in his general form and figure. Several of the cases that were successfully treated were utterly unable to stand upon the feet when the treatment commenced, and one, a female, was incapable of being turned in bed without spasms; her emaciation was extreme, greater than I ever before witnessed from any cause, and no language could have been more expressive than that uttered by the attending physician, on the occasion of my visit to the patient, that, "in adapting appliances to this patient is like fitting stays to a *gun lock*."

There also appeared in the same journal, an outline drawing of the apparatus used in the treatment of those cases, involving a new principle in its application and modus operandi. As I now propose, from time to time, to give additional cases to prove the efficacy of the treatment alluded to, and as I have reason to fear that very many of the readers of the Medical Times may not be acquainted with the apparatus referred to, I have thought best, at the risk

of a repetition, to describe the apparatus in connexion with the accompanying cuts.

It extends from a point near the top of the shoulders to the promontory of the sacrum, and from the pubes nearly or quite to the top of the sternum, and embraces the entire form within those limits. It laces in the centre of the back, for the purpose of opening to allow the more prominent spinous processes of a *large* curvature to pass through and leave their extreme points free from pressure, and bring the force of the springs to bear directly upon either side at their base. The apparatus is brought together and secured in front by appropriate fastenings (as seen in the figure), convenient for its application and removal, and at a short distance from the centre on either side are parallel lacings, extending from above downwards, the entire length of the apparatus. Shoulder braces are attached by lacing upon the back of the apparatus, and are brought over the shoulders and fasten under the arm. The springs, which give efficiency to the apparatus, are arranged and confined within the material of which the apparatus is made, and are of variable stiffness to meet the necessities of the case. The form of the apparatus also varies, as all cases that come under treatment are not alike. It curves regularly over and *under* the bowels which are usually, in these cases, both prominent and pendent, a condition that of itself serves greatly to aggravate the difficulty we wish to remedy, and increase its force. As the application is made general over the whole body, every part receives its due support and aids the pressure made more directly to the affected part.

After the apparatus has been properly adjusted and all the points duly considered, the front lacings are then to be tightened, by which any required amount of pressure may be produced; but the *feelings* of the *patient* are *always* to be consulted in the regulation of it, as it is *never* necessary to have it so great as to render him even uncomfortable. The effect of the apparatus is to elevate and support the abdominal viscera, and retain them in their normal position; this relieves the spinal column of a heavy weight, dragging from its superior portion, and not only so, but receives great support from this source.

The crutch, represented in the cut, when required, is attached to the apparatus by the lower end resting in a pocket just large enough to receive it, and the narrow band across the upper part of it to hold it in place. The upper part of the crutch is so arranged, that it will rotate and accommodate itself somewhat to the movements of the patient, and supports the weight of the shoulders without resting directly upon the hips.

Having given, as I presume, a sufficient introduction to the cases, I at once commence their narration.

Case I.—Son of Mr. G., City of New York, æt. six years and two months, of light complexion, scrofulous diathesis, and full development, came under treatment for Pott's disease of the spine, Feb. 20, 1860. From the mother the following history of the case was obtained:—In April, 1859, the child was attacked with whooping-cough of unusual severity, which continued several weeks. In June, the cough still continuing, the patient was seized suddenly with pain in the back, and for several days was unable to rise from the recumbent position without assistance. Shortly after, an attack of dysentery supervened which continued three or four weeks, reducing the child to a degree that rendered its recovery doubtful.

In Sept., after apparently recovering his usual health and strength, an injury was produced by a slight fall. The pain in the back continued and became quite severe at times, more particularly in the night. In Oct., a slight projection was discovered in the lower part of the spine. In Dec., the projection had greatly increased, the pain was more constant and severe; one limb was considerably contracted and drawn up, and locomotion much embarrassed. Since that time the child's condition had been growing worse. Upon

Fig. 1.

Fig. 2.

examining the case there was observed a bold posterior curvature, as represented in Fig. 1, and quite acute in its form, having for its centre the third lumbar vertebra. Locomotion was performed with difficulty, and while standing or sitting the patient was constantly inclined to rest upon his hands for support, and for relief from pain and suffering.

The treatment consisted in mechanical pressure upon the affected part, and general support applied to the body (flexible in its character), to render the support to the spinal column as efficient as possible; together with the use of some of the more ordinary tonics usually given in such cases. The mechanical appliances were often readjusted, and such alterations in their construction were effected, from time to time, as the changes in the size and form of the curvature and figure of the patient rendered necessary.

Upon the application of the apparatus, the patient was relieved of his suffering and enabled to walk about comfortably. The patient was soon allowed to exercise freely in the open air, being restricted only to two hours' rest during the day to avoid too much fatigue.

The patient is now strong, robust, and healthy, with the curvature reduced as seen in Fig. 2. It is worthy of note that, as in the present, very many cases of Pott's disease of the spine are developed under the influence of whooping-cough, measles, or scarlatina.

The outline of this case was taken five or six months

since, at which time the curvature was still gradually diminishing.

N. Y. 31 Cooper Institute, Jan., 1862.

Reports of Hospitals.

COLLEGE OF PHYSICIANS AND SURGEONS.

PROFS. PARKER AND MARKOE'S SURGICAL CLINIC.

I.—NECROSIS OF FEMUR—OPERATION. II.—OVARIAN TUMOR.

[Reported by A. E. M Purdy, M.D.]

I.—*Necrosis of Femur—Operation.*—The patient, æt. 3 years, was quite a large, rosy-cheeked child, of healthy parentage, who, about eight months previously, was attacked with violent febrile symptoms, accompanying which was a large painful swelling above the knee, on its internal aspect. This swelling increased, and a physician was consulted, who, believing it an acute abscess, lanced it. A slight discharge of pus and blood followed, which continued more or less until the patient was presented to the clinic. The ordinary objective symptoms of necrosis were then present: enlargement of the limb and hardness, owing to the presence of involucrum, a dusky livid appearance to the skin, and a pouting fistulous orifice, discharging a fœtid sanguineous fluid. The fistula was situated a short distance above the knee-joint, but did not communicate with it. Contrary to the general rule, the necrosis was confined for the most part to the cancellous structure. The patient was etherized, and an incision made through the soft tissues to the bone, in a direction upwards, in order to avoid the joint. This being done, it was then found unnecessary to use the gouge or trephine, as the necrosed portion could be removed through the opening made by nature. Dr. Markoe, in dismissing the case, spoke of the necessity of a careful use of the instruments, otherwise the soft granulations covering healthy bone would be scraped off, exposing a bare, bony surface, which might be mistaken for sequestrum; also that great care should be taken to extract all the diseased or necrosed portions, because if any should be left, there was danger of having the trouble renewed. The edges of the wound might be brought together by adhesive straps, or interrupted sutures, if necessary, and dressed simply with lint and cold water. By this operation thus promptly performed, he thought that the patient would entirely recover; whereas, if the inflammation had been allowed to continue, it would, in all probability, have implicated the knee-joint, through the fibrous tissues surrounding it, and anchylosis would have been the result.

II. *Ovarian Tumor.*—The patient, æt. 36, a strong and apparently healthy married woman, with no children, noticed some five or six years ago, in the right hypochondriac region, a tumor about the size of a hen's egg. She suffered little or no pain, but had occasional abdominal cramps, and the stomach was somewhat irritable. She had never been subject to dysmenorrhœa, but, during the last three years, she had menstruated too freely. The symptoms here, as in most instances, were very obscure. The tumor at the time she presented herself, though large, was mostly confined to the side on which it was first discovered; her menses had become more regular, her stomach less irritable, and her health generally improved.

Dr. Markoe remarked that ovarian tumors were cystic or solid in character, and very commonly a combination of both. It was exceedingly rare that a completely solid tumor was developed in the ovaries, it more generally occurred in the uterine walls; thus illustrating the pathological history of tumors, which is, that they always partake of the nature of the parts whence they arise. Considerable difficulty, continued he, is usually found in the diagnosis of ovarian from uterine tumors; but there is reason for suspecting this to belong to the former class, occurring as it does on one side, while tumors of the uterus usually occur in the median line. Ascites is another condition, likely to be confounded with ovarian disease. The history of the origin and growth of the tumor will greatly aid in a proper diagnosis. Ascites commences low down, and increases upwards, whilst the ovarian tumor occurs on one side, higher up. The enlargement is symmetrical in ascites, while in ovarian disease one side is more prominent than the other. Percussion over the front of the abdomen generally gives a dull sound in ovarian tumor, for it scarcely ever happens that any intestine lies between the diseased ovary and the abdominal walls; whilst, in ascites, the intestines are nearer the surface, and percussion gives the characteristic tympanitic sound. If it is ovarian, it will be composed of one or more cysts, which, enlarging, fill the whole abdomen; when this latter condition obtains, it is difficult to distinguish it from tumor of the uterus. Is it cystic or solid, or a combination of both? Usually when there is this formation, you can distinguish some of the small cysts. Upon physical examination of the patient, distinct cysts cannot be felt, but a general feeling of fluctuation is appreciable. When the ovarian tumor is very large, of rapid growth, and occupies the median line, it may be confounded with another condition, viz. pregnancy. The points of distinction are easily made out in cases of doubt, by recourse to the auscultatory evidences usually found, when there is a fœtus in utero. The most important of these are the pulsations of the fœtal heart and the placental souffle. The first can be heard about the fifth month, in the middle of the abdominal region, and usually on the left side. The second can be detected about the fourth or fifth month, is synchronous with the mother's pulse, and subject to its variations. Neither of these signs can be detected in this case. In studying the diagnosis of ovarian disease, care should be taken not to overlook the possibility of other abnormal conditions.

Treatment.—Little can be done to check the course of the disease. Iodine is supposed to cause the absorption of these tumors, and in its various forms has received considerable credit, especially Lugol's solution, carried as far as the stomach will bear. A very good prescription is the following:—℞. Potass. iodid. ʒ j.; solut. Lugol. ʒ ij.; aquæ ʒ viij. M. A tablespoonful thrice daily, one hour after eating, will be good for the patient, giving iron if it is required, also astringents, or any other adjuvants that may be necessary. The tumor may enlarge slowly, or it may never give any more trouble. Ovariotomy was recommended.

Petroleum.—Prof. George Hadley says:—"The manufacture of Coal Oil, closely followed by the discovery and opening of immense sources of Petroleum in Western Pennsylvania and in other regions, is introducing a new era in the art of illumination. Already a marvellous improvement has been effected in the comfort of many homes. Tallow candles no longer make the darkness visible; whale oil and sperm are abandoned to the railroads and machine shops; and even the clear brilliancy of wax, and stearine, and spermaceti suffers eclipse. 'Burning fluid,' so popular and convenient, is far inferior in economy, safety, and illuminating power, to its new rival; and with the single exception of coal gas, these substances seem likely to supplant, in common use, every other material employed for purposes of illumination. Not only their brilliancy, but the great abundance and consequent cheapness of the new burning oils, is fast contributing to this result. This is particularly true of Petroleum. The productiveness of the 'Oil Wells' is truly astonishing. From some of them Petroleum has continued to flow spontaneously for many mouths at the rate of several hundred barrels a day. The total product of those on Oil Creek alone has been estimated at not less than ten thousand barrels, or four hundred thousand gallons a day. And in other localities are enormous reservoirs, which are now pouring forth their treasures, stored up for ages, to give a new fulfilment to the ancient fiat, 'Let there be light.'"—*Buffalo Medical and Surgical Journal.*

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, January 8, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. FORDYCE BARKER'S PAPER ON THE USE OF ANÆSTHETICS IN MIDWIFERY.

(*Continued from page* 69.)

DR. I. E. TAYLOR could not endorse all the propositions laid down in the paper of Dr. Barker. He was inclined to look upon chloroform rather as a stopper than an accelerator of labor, and that its use was only admissible in cases where a great amount of nervous excitement was present, in hysterical diathesis, irritable condition of the vagina, uterus, etc. Again, in consulting statistics, he had found that the proportion of deaths from instrumental labors was much greater since chloroform had been used than formerly. When chloroform was necessary in cases of instrumental delivery or in version, he maintained that much danger to the child would be prevented by carrying the anæsthetic effect just short of affecting the voluntary muscles. The danger to the child was also to be taken into account. It had been stated that the odor of the anæsthetic had been detected in the breath of the child some time after birth, and it was reasonable to suppose that no particular amount of benefit could arise from the existence of such a state of things. As to its use in puerperal convulsions, he did not think he would resort to it when the complication of uræmia existed.

DR. FINNELL had been in the habit for twelve years past of using both chloroform and ether in midwifery practice. The former was preferred when a prompt effect was desired, and the latter was considered most applicable during tedious labors. Notwithstanding he was willing and able to testify to the general good effects of anæsthesia, he was inclined to think that in many cases of instrumental delivery, chloroform had not a little to do in determining a fatal issue.

DR. PEASLEE, in reference to the use of chloroform, divided practitioners into five classes: 1. Those who used chloroform exclusively; 2. Those who made use of chloroform almost exclusively, but ether sometimes; 3. Those who very seldom used chloroform, but ether almost always; 4. Those who used ether exclusively; and 5. Those who rejected both ether and chloroform. He confessed to belong to the third class, and gave the following reasons for his position: 1. Ether was safest; 2. It was a milder agent than chloroform, and accomplished the purpose equally well; 3. The general voice of the profession, as previously stated by Dr. Elliot, was in favor of ether, especially in cases of cardiac disease. With reference to the point suggested by Dr. Griscom at a previous meeting, as to the degree of anæsthesia to be induced, he stated that inasmuch as ether was slower in its action than chloroform, the desired effect could be more easily obtained. Enough could be given of the ether to abolish sensation without interfering materially with muscular power, more especially as the motion-destroying properties of the anæsthetic were less than those observed in chloroform. Dr. P. is in the habit of allowing obstetric patients to etherize themselves until such time as he desires to abolish all suffering. The very difference in the ascetic effects of the two agents would induce him to use chloroform in some instances, just as he would ether in other instances. If he wished to remove spasmodic rigidity in puerperal convulsions, muscular contraction, or rigidity of the perineum, chloroform would be decidedly preferred, for the reason that ether would take a longer time and do it less effectually. In looking over the propositions in Dr. Barker's paper, he would accept all, except that he would substitute the word "ether" where chloroform was used, while under the head of puerperal convulsions he would say that ether might be employed, but that chloroform was the more valuable of the two.

DR. WORSTER maintained that chloroform was not at all dangerous when administered under certain restrictions. He believed that anæsthesia affected in regular order, first, the nerves of sensation, second, those of volition, and third, those of the involuntary system. He had always been in the habit of measuring the degree of anæsthesia in obstetric practice by the ability which the patient possessed of holding up her hand; as long as she could do that, it was perfectly safe to continue the administration. In regard to any preference to ether over chloroform, he would just as soon think of selecting a dull knife instead of a sharp one when he wished to perform an operation.

DR. WATSON had long ago come to the conclusion, that no essential property claimed for chloroform was not possessed by ether, and that the latter had the incomparable advantage of being safer. The arguments brought forward by the author in his paper were not to his mind sufficiently strong to justify the conclusions arrived at. He used ether in obstetric practice, and obtained from it every anæsthetic effect which he required for any purposes of operation. Before any serious charges had been made against chloroform, he had occasion to make use of it in an operation for amputation of the breast. The patient was a strong healthy woman, and the operation was by no means a severe one, but on its completion respiration suddenly ceased. The anæsthetic was administered by Dr. A. L. Sands, and the utmost care was taken to guard against any bad result. It was only after the most strenuous efforts that the life of the patient was saved. Shortly after this Dr. Buck used chloroform on a patient for the purpose of operating for fistula in ano, but hardly had the knife touched the parts, before death took place. Since then chloroform has never been used in the New York Hospital. He referred to two additional cases under his observation, to illustrate the danger attending the administration of chloroform. The first was a woman who had, after an inhalation, suddenly expired. The physician who had administered it to her on several previous occasions for the disease under which she was then suffering, puerperal mania, walked from her bed to the fire, said he heard her speak, and turning to her immediately after, found her dead. The other case occurred in the wife of a medical gentleman, who sent for Dr. Watson in great haste. Chloroform was given for confinement, and notwithstanding the utmost watchfulness, the case came very near resulting fatally. He did not believe but that deaths from chloroform had occurred in obstetrics.

DR. BARKER admitted that three such instances were on record, but that the agent in neither case was administered by or under the direction of a medical man.

DR. WATSON thought that if the chloroform was administered under the direction of a physician by another person, the physician was responsible for the result. Dr. W. next proceeded to quote the following case (*Amer. Jour. of Med. Sciences*, April, 1854, 592) to illustrate the accumulative effect of chloroform, a property which he claimed was not possessed by ether.

"Dr. De Wolf, of Chester, Mass., records (*Buffalo Medical Journal*, Dec., 1853) the following case:—I was called in an adjoining town in consultation with my friends, Drs. Freeland and Smith. The patient was a young lady of 25 years, of full and vigorous health, and in her second accouchement. I found her dying, but conscious, and obtained from her the following history:—'Some thirty hours before Dr. Freeland was called in, and found her in the "preparatory" stage of active labor. For several hours there was very little development of the case, and the patient became importunate for chloroform, having inhaled it during her first parturition. The doctor explained her present condition, and advised her that now was an improper time to use it, and after waiting a few hours, bled her from fifteen to twenty ounces. At this period the case seemed to have made but little progress, and after an anodyne of some forty drops of tincture of opium, she obtained some rest. When she awoke, she complained of pain in the abdomen and loins, and again importuned for chloro-

form. Strong and full pulse, not exceeding 100, tongue moist and clean, uterine action rather tardy, os uteri yielding, head advanced, pelvis roomy, and no unpleasant symptom. Under these circumstances, the doctor promised her speedy relief, and persuaded her to take a decoction of ergot. Very soon she insisted on having chloroform, and sent a messenger for Dr. Smith. The doctor came and brought, as requested, a small bottle of chloroform, containing, as he believes, not more than ʒ ij. He put it upon a table in sight of the patient, and while listening to Dr. Freeland's narrative of the facts in the case, the patient instructed a female friend to give her the bottle, and refused to give it back. She inhaled from time to time, and when told by both physicians that by persisting in the use of it she would peril the successful termination of her labor, and possibly her life, her reply was: "My pains are quite comfortable." And in this last condition she remained about twelve hours. Upon a careful examination, no material change in arterial action or nervous power was discovered, but very clearly, as they thought, a promising change in the rigidity of the organs, and the chloroform being gone, they felt confident that there would soon be increased uterine action, and the triumphal finishing up of the case. Alas! they were soon to be released, and their patient too. Now it was, that absence of all pain and cold sweat, cold extremities, oppressed and whizzing respiration, receding pulse, and vacant glare, pointed to a sudden and fatal termination; all their friction, hot appliances, and active stimulus were of no avail. I looked upon the dying woman with feelings of deep sorrow, for in her history I could see nothing aside from the chloroform to bring before me such an end, and hence I came to the following conclusions:—1. The *time* of her suffering would not have done it; 2. The *amount* of her suffering would not have done it; 3. There had been no rash quackish meddling; 4. There was no rupture of the vagina or uterus; 5. There was no evidence of cerebral congestion from plethora or other cause; 6. Patient perfectly conscious, but insensible to pain; and finally, her death, as it seemed to me, could be chargeable to nothing but the abolition of vital force from frequent repetition of partial anæsthesia.

'I have said she was perfectly conscious, and here is the evidence. She knew they had sent for me, and on my arrival I met the physician in an adjoining room, and while listening to the facts above written, there came in a lady and said that the patient desired to see me. In surprise I asked, *How is this?* The answer was, "she is positively conscious, but dying!" As I came into her presence she anxiously inquired, "Oh, Doctor, can you take my child and save me?" I very soon assured her I could take the child, and did so. To take the child was then quite easy, but to save her life was impossible. The child, a fine boy, was dead, and in ten minutes the anxious mother was a corpse!"'

The case of puerperal mania referred to was another instance of this sort, where the woman spoke some time after the administration ceased; and then died immediately. Other cases were also to be found, illustrating the same point: *Snow*, p. 204; *Year Book of Medicine; New Sydenham Society*, ii., p. 462. He also recited two other cases, where the patients narrowly escaped death from chloroform, showing the necessity of the greatest care on the part of the administrator.

The first (*Amer. Jour. of Med. Sciences, Oct.*, 1853, p. 529) was reported by M. Boinet. Chloroform was administered to a lady, 30 years old, for the purpose of applying the forceps. The handkerchief, containing about ʒ ij. of the agent, was held a short distance from the nose, the patient becoming speedily anæsthetized without any previous excitement. The handkerchief was then removed, but the operation promising to be a long one, M. Boinet directed the husband, who was acting as his assistant, to continue the administration. This he did, and forgetting everything in his anxiety, left the handkerchief over her face. When, however, the child was being withdrawn, it was discovered that the mother was pulseless, and that all the characteristics of death had made their appearance. For five minutes fresh air, cold water, slapping, and ammonia, were used to no purpose; and it was only after the most persistent efforts at insufflation, that a fatal result was prevented.

The second case was reported in the Lancet, by Dr. McClintock (*Amer. Jour. of Med. Sciences*, 1855, p. 531). Chloroform was administered by an experienced assistant to a woman in labor on account of rigidity of the os, general irritability, etc. She was kept under its moderate influence for an hour, but not experiencing any relief, the quantity of chloroform was increased to ʒ j. After three or four deep inspirations, a change came over her countenance, the eyeballs turned up, the pulse left the wrist, respiration was suspended a space of time that would have occupied about three or four inspirations, and some froth collected at the angles of the mouth. The sponge was immediately removed, the free circulation of air induced, cold aspersions of water resorted to, stimulation, etc., when she was finally considered out of danger.

Dr. W. had not taken any special pains to hunt up authorities, else he was confident he might have found more cases to prove his point.

(To be continued.)

American Medical Times.

SATURDAY, FEBRUARY 8, 1862.

THE ETHER PATENT.

We noticed the fact last week that Dr. Morton had commenced prosecutions for the infringement of his ether patent, that the first institution summoned to answer the charge was the New York Eye Infirmary, and that the case was arrested for the present term by the Judge, on the ground of doubts as to the validity of the patent. It may not be out of place at this time, to review briefly the leading facts in the history of this case.

Priority of discovery of anæsthesia by the vapor of sulphuric ether, has been a sharply disputed question between the friends of the late Dr. Horace Wells, of Hartford, Ct., and Dr. Morton. We shall be content, however, to let this question rest where the majority of medical men have placed it, viz. that Dr. Morton is entitled to the credit of having reduced anæsthesia to actual practice. The first use of ether as an anæsthetic in surgical operations, was made in the Mass. General Hospital, Oct. 16, 1846, Dr. John C. Warren being the operator. Application was at once made to secure a patent covering this discovery, and in about a month from the above date letters patent were issued. Dr. Morton was not at that time a medical graduate, but subsequently obtained the degree of M.D. from the Washington University, Md. The patent was issued in the names of Dr. C. T. Jackson and Dr. Morton, but the former subsequently assigned his claim to the latter.

The profession of course condemned the patent, but they were assured that there would not be the slightest restrictions put upon the use of ether. It is stated that Dr. M. "requested Dr. Warren to give him as perfect a list as possible of all the hospitals and charitable institutions in the country, that he might present them with the use of this new blessing to their suffering patients. This praiseworthy request was granted, and soon every eleemosynary institu-

tion in the country, where surgical operations were performed, every charitable hospital, and many eminent surgeons, were offered free licence to use the discovery."

In putting the most charitable construction upon the patent, it is difficult to overlook the fact that the right of using it was undersold, that a second was obtained in England, and that efforts were made to obtain others in Continental countries. It would not be doing violence to human nature to suppose that the patent was obtained for the purposes of gain, and this impression is strengthened by certain incidental circumstances, but we prefer to believe that the alleged reasons for securing it are those which alone actuated Dr. Morton. These are, "1. He wished to make such modifications as experience might suggest, as regards the method of exhibition; 2. He wished to instruct a suitable number of competent persons, who, when wanted, could go to any part of the country and administer it themselves until its merits were fully established; 3. He wished to prevent its being, at its infancy, brought into disrepute or doubt, by ever being used at the hands of injudicious, or unskilled persons."* It has also been alleged by Dr. Morton, that he "procured the patent to enable him to induce the Government to reimburse him for his expenditures in making and establishing the importance of the discovery to the world."

Certainly, no effort was made to enforce the patent; ether soon came into general use, without fee or reward to Dr. Morton. Looking towards compensation for his discovery, Dr. Morton soon after, Dec. 28th, 1846, made application to Congress for an appropriation of $100,000 as a "national recompense." His application was favorably received, but the claims of Drs. Jackson and Wells, as the discoverers of ether, were also pressed, and the session passed without any definite result being reached. A second application was made in 1849, which met with a similar fate. In 1851, a third application was more favorably received than either of the former, and commanded the hearty support of the leading members of both houses, but this measure likewise failed. In 1853, Dr. Morton made his final attempt to obtain a reward from Government, but so determined was a factious opposition that the bill again failed. It was now contended by the opposition, that Dr. Morton's true remedy was in the prosecution of the Government, for the infringement of his patent in the use of ether in the Army and Navy; such suit being sustained, Government would be compelled to make proper payment. Efforts were now made to induce the Secretaries of War and the Navy to purchase the patent, or to forbid the further use of anæsthetics in their respective departments. But these efforts also failed, and Dr. Morton quitted Washington in despair. He returned home enfeebled in health and burdened with debt. He was strongly urged by legal counsel to bring a suit against Government for infringement of his patent, and thus secure himself against impending ruin. A suit was accordingly commenced against the Physician of the U. S. Marine Hospital, Chelsea.

Meantime, in the spring of 1857, at the suggestion of Mr. Amos A. Lawrence, a wealthy citizen of Boston, who had always been cognizant of Dr. Morton's labors, a plan was matured, in connexion with the medical profession and influential citizens of that city, for raising by private subscription throughout the United States, $100,000, as a national testimonial. An appeal was issued to the Patrons of Science and the Friends of Humanity, setting forth the claims of Dr. Morton, and urging the importance of testifying, by pecuniary donations, their obligation to the discoverer of "Practical Anæsthesia." It was numerously signed by the physicians and citizens of Boston, and was responded to by liberal donations. Mr. Lawrence subscribed $1000; the Mass. Gen. Hosp., $1000; the Mass. Charitable Eye and Ear Infirmary $500, etc., etc. Dr. Morton subsequently visited New York, and the scheme of a "national testimonial" was heartily endorsed by the medical profession of the city. Large meetings were held at which the claims of Dr. Morton were freely discussed and almost universally conceded. The movement became still more popular when it was alleged on behalf of Dr. Morton, that the odious patent was given up and would never again be brought forward. The Governors of the Alms-House voted $1500 to the fund; the New York Hospital $500; and private citizens gave most liberally. Dr. Morton proceeded to Philadelphia in pursuit of the object of raising this fund. What has been his success we are not advised, having heard nothing further from this appeal since his visit to New York, now nearly four years ago. The only intimation of Dr. Morton's movements since that date, is the announcement of the prosecution of the N. Y. Eye and Ear Infirmary for infringement of his patent.

We have thus given a brief outline of the ether controversy, which, in all its details, fills volumes. Practically we may reduce this question to these points:—1. To whom is the world indebted for "practical anæsthesia?" 2. How should the "Public Benefactor" be remunerated? We should settle the first question (not definitively), by yielding to the deliberate judgment of our Boston brethren; and the second, by affirming that Government should liberally reward the discoverer. Against patents in medicine and surgery, the profession have always protested as illiberal, unjust, and unworthy the attention of members of a liberal, humane, and scientific profession. They have never been satisfied with the apologies of Dr. Morton for obtaining a patent in this case, but plausible assurances have tended to allay their prejudices. They will now learn with profound regret, the attempt of Dr. Morton to enforce this patent and obtain damages against public institutions for its infringement. Whatever may be his claims upon society at large for pecuniary reward, he certainly has no claim in equity upon the medical profession, or the public charities of the country. We hope that at the next trial the impressions of Judge Shipman, that the patent is not valid, will be confirmed, and the profession and charitable institutions relieved from prosecutions which will otherwise await them.

* Trials of a Public Benefactor, as illustrated in the discovery of etherization.

THE WEEK.

We have called attention to the position of the army surgeons on the battle-field, and urged the importance of coming to some understanding with the enemy in regard to their rights. Hitherto there has been an indiscriminate arrest of surgeons while performing their sacred offices as non-combatants, thereby inflicting great suffering upon the wounded. We are glad to notice that Gen. Buel has given orders, that hereafter the surgeons of the enemy shall not be disturbed on the field. We hope that order will be

generally adopted by our officers. In a recent lecture on the usages of war, Prof. Lieber holds the following language in regard to the obligations of belligerents to the surgeon :—

"*First.*—They should not be fired upon by single aim; they are ministering angels bringing comfort to the wounded, and should not be shot any more than a Chaplain, and who would fire upon a Chaplain?

"*Second.*—If taken prisoners, they should be set free, unless special reasons prevent it.

"*Third.*—They may retain them if they lack physicians, provided the enemy fully trusts them. In one of the most sanguinary battles of modern times, the enemy drove the French till they reached the tables erected for the use of the surgeons, where they were then at work, yet no one thought of touching them—a very striking illustration of things as they always should be."

—

The *British Medical Journal* professes great surprise that the American medical journals contain no opinions in reference to the war now going on in the "Disunited States," and concludes, therefore, that the war must be a matter of complete indifference to the medical profession, except so far as they may be professionally engaged in it. We have, on our part, examined the British medical journals in vain to find an opinion in reference to the "Trent Affair." Does the medical profession of England take no interest in a prospective war with the "Disunited States?" We should be surprised, if not pained, to find the columns of the *British Med. Jour.* filled with political discussions.

—

In commenting upon our remarks on the status of American Physicians abroad, the *British Medical Journal* disclaims on the part of the profession of England any distrust of their American brethren. We are glad to receive such assurances of good-will and professional consideration from a journal which directly represents the sentiments of the great body of the English profession. That this fraternal feeling is reciprocated on this side of the Atlantic, every page of our periodical literature bears ample evidence. Still we cannot lose sight of the fact, that a most respectable public journal has deemed it necessary, on publishing a case by an American physician, to state, "We take this opportunity to deprecate the habit of discrediting facts coming from the other side of the Atlantic, and authenticated with such names as Hamilton, Flint," etc. That this paragraph was written to meet a current prejudice we have no doubt, and we can scarcely believe that the Dublin Editor wished mercly to rebuke "a joke at a manifest Colonel Crockett tale." An American journalist, having a conscientious regard for the position of the medical profession abroad, cannot justly be charged with "over-sensitiveness," much less with "absurd captiousness," who notices such remarks as that above quoted.

—

At Liverpool Assizes, an action was brought against Mr. White, a Manchester dentist, for seduction of a girl aged 19, a patient, while under the influence of chloroform. After a lengthy investigation, the jury found the dentist guilty of the seduction; but were satisfied that it did not take place under the influence of chloroform. Mr. Lunn, surgeon of the Manchester Hospital, very properly remarked, that he never administered chloroform when alone with a patient.—*British Med. Jour.*

Nurses for Canada.—We understand that a body of trained nurses, on Miss Nightingale's plan, are to proceed at once from the Herbert Hospital to Halifax.—*Lancet.*

Reviews.

Therapeutics and Materia Medica. A Systematic Treatise on the Action and Uses of Medicinal Agents, including their Description and History. By Alfred Stillé, M.D., etc. Philadelphia: Blanchard and Lea. 1860.

Dr. Stillé has for several years been favorably known to the profession as an author, and his reputation is sustained by the voluminous work before us. There is in this country, as well as in Europe, a certain amount of useless medical authorship. This is to be expected, when we consider the wonderful activity displayed in our science during the past few years. Emulation of the schools, and desire of personal distinction, have no less effect to create authors, than has the more worthy ambition to benefit the profession. Hence, every year there are publications of our medical press which do not contain anything new, and do not present known facts in any better form than we find in the pages of previous writers. Dr. Stillé's work is not to be placed in this category, for it differs essentially in its plan from most former treatises on therapeutics and materia medica. He gives a succinct account of the mode of preparing medicines, and of their sensible properties; but the chief merit of the work consists in the numerous citations from various observers, to determine the exact therapeutic action of remedies. For example, over twenty pages are devoted to the effects of tobacco on the economy, as noticed by different physicians and experimenters, while only two pages are given to the description and history of the plant. So of ergot: the account of this morbid growth, its preparation, and the history of its use, fill but three pages, while the abridged testimony of numerous witnesses of its effects on man and animals occupies twenty pages.

It, unfortunately, is true, that physicians are apt to form their opinions of the action of remedies from too small a number of observations, or without proper discrimination of the exact pathological state, and to publish their views prematurely, so that a medicine is not unfrequently vaunted as of great service, when on further trial it is found entirely inadequate to check, or even ameliorate the morbid process. Medical journals contain many such ill-advised publications, and it requires a discriminating mind to select what is trustworthy and valuable. We believe the author has in the main shown a just discrimination, and has generally pointed out the error, where too much was claimed for a remedy.

It will be seen that this work is designed for the physician, rather than for the druggist or pharmaceutist. It is an octavo, of nearly eighteen hundred pages, of excellent typographical execution. The author classifies remedial agents according to their effects on the economy, and he prefaces the description of the individual agents in each class by remarks, for the most part timely and judicious, on the subject matter of that class. He devotes little space to theorizing, which is more apt to be injurious than beneficial in scientific writings. He leaves it to the reader to draw deductions, or to theorize, it being his aim simply to embody in the work the accumulated experience of the profession.

The author has enhanced the value of his work for physicians, by treating fully of remedial agents which are not medicinal, as *heat*, *cold*, *water*, and *electricity*, since these agents, if intelligently employed, are no less effectual than medicines in arresting disease.

While we speak in terms of praise of these volumes, it is our duty, as reviewers, to mention their defects, which are chiefly those of omission, and such as may easily be remedied in another edition. Dr. Stillé makes no mention of many new remedies, some of which we in New York use extensively, and consider of great value. No mention whatever of the *liquor ferri persulphatis* in a work on materia medica, will be considered an important omission

by those who have witnessed its hæmostatic power. This agent has been known nearly ten years, though not much used in this country till within three or four. Again, we look in vain in these pages for any mention of the liquor opii compositus, sodæ chloras, and unguent. zinci benzoat., which are considered valuable preparations in this city.

These omissions are probably due to the fact that new remedies such as we have mentioned are used more extensively in New York than in Philadelphia, since our knowledge of them is due mainly to the presence, in our vicinity, of that able chemist and pharmaceutist, Dr. Squibb. The confidence reposed in him by physicians in this community is very great, and his preparations, not only of new but of old remedies, are considered the purest and most reliable of any in our shops. A writer on materia mediea should have a better knowledge of Dr. Squibb's labors than the author appears to have.

In another respect we think this work might be made much more profitable, namely, in a more extended description of the adulterations and impurities of medicines. Much of the disappointment and disagreement of physicians, in reference to the action of medicines, arises from the use of impure or inferior articles, and a systematic treatise on materia medica should not only point out these but should indicate as far as possible the laboratories from which the best preparations come. The single article of chloroform will explain our meaning. Now it is kuown that Dr. Squibb, who does not manufacture chloroform, but purifies it, has sometimes found as large a proportion of impurities as twelve per cent. in specimens coming from reputable laboratories. These impurities are chiefly hydrocarbons, and the injurious effect of them, when inhaled, is apparent.

It is a laborious task to write a work like the one we are noticing, for it requires not only an intimate knowledge of other treatises but also extensive reading of medical periodicals. Every page shows that the author has fully appreciated the character of his undertaking, and with proper care in preparing and enlarging future editions, this work will remain a valuable addition to medical literature.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.

FIFTY-FIFTH ANNUAL SESSION.

The Society met in Albany pursuant to statute, at 11 A.M., on Tuesday, Feb. 4, 1862, for its Fifty-fifth Annual Session.

The President, Dr. E. H. Parker of Poughkeepsie, in assuming the duties of the chair, made a few brief remarks. After alluding in an appropriate manner to the death of his immediate predecessor in office, he called attention to the unusual prominence which military surgery had attained since the previous meeting of the society, and urged upon all present to cultivate a knowledge of that particular branch, in order to be prepared, if required, to give their services to their country. He also mentioned the fact, that the State of New York was the first which had taken decided steps against admitting into the ranks of the volunteer corps any but competent surgeons; and in consideration of such a step, hoped that the society would express their approval of it by a suitable vote of thanks. Referring to the duties of the military surgeon upon the battle-field, he spoke of the necessity of the wounded who were left behind being properly cared for by their own surgeons. Alluding to the heroism of those surgeons who remained with their wounded after the battle of Bull Run, he suggested that the society should take such action as should show these gentlemen, whether from this or other states, that their heroism was noticed by the profession. He had also hoped to be able to propose some plan, by the adoption of which the sufferings of war might, so far as the wounded were concerned, be alleviated by allowing the surgeons of both armies to visit the battle-field for this purpose, but had met so many obstacles that he had desisted from the attempt. He, however, urged the society, if they could devise any method of accomplishing this, to do so.

The following committees were next announeed:—

Committee on Credentials.—Drs. Porter of Oneida; Ferguson of Warren; and Willard of Albany.

Committee on Nominations.—Drs. Bissell of Oneida; Vanderpoel of Albany; Crispell of Ulster; Bly of Monroe; Finnell of N. Y.; French of Broome; Hall of Cayuga; Reynolds of Saratoga.

The Secretary, Dr. S. D. Willard of Albany, presented a memoir of Dr. Merrit H. Cash of Orange, and announced that $500 had been bequcathed to the Society by the deceased member.

Dr. Bowen of Oswego offered the following:—

Resolved, That a committee of two be named by the chair, to extend an invitation to such members of the Legislature as belong to the medical profession, to attend the meetings of this Society during its present session.

The committee consisted of Drs. Bowen and Potter.

Dr. Bissell of Utica also offered the following resolution, which was accepted:—

Resolved, That the thanks of this Society be tendered to the Presiden for his interesting and suggestive address, and that a copy of it be requested for publication in the Transactions of the Society.

Resolved, That a committee of three be appointed, to consider and report such action thereon as may be deemed necessary.

Drs. Bissell, Townsend, and Kendell, were chosen as that committee.

PATHOLOGICAL SPECIMENS.

Dr. T. C. Finnell, of N. Y., presented three pathological specimens. The first was the bones of the foot and leg, removed from a patient, æt. eighteen years, who eight years previous to her death suffered a compound fracture of the ankle-joint by the falling of a heavy piece of timber upon it. The foot was turned strongly inwards, and remained ever after in that position. The ankle-joint, tarsus, and metatarso-phalangeal articulations were firmly anchylosed. Interstitial absorption of the bones of the tarsus had taken place to such an extent as to leave a mere shell of the form of the bones. The second specimen was a portion of skull showing a compound fracture, caused by a blow from a brick, the interesting feature of the case being the presence of a portion of the missile firmly imbedded in the bony structure; this remained in that situation for two weeks previous to the death, without giving rise to any head symptoms. The third specimen was the skeleton of a monster. He also exhibited some barbarous-looking obstetrical instruments which had been the property of an old Cuban physician, consisting of pelvimeters, sounds, crotchets, forceps, perforators, etc. Lastly he read a case of dysentery in a child, æt. 9, ending in suppurative peritonitis, spontaneous perforation at umbilicus, with discharge of four pounds of pus; and perfect recovery at the end of four months.

The following communication, relative to the appointment of homœopathic surgeons to the army, was received from the Oneida Co. Medical Society:—

Whereas, Great exertions are now being made by circulating petitions throughout the country asking Congress to pass a law appointing homœopathic practitioners to the post of Army Surgeons, therefore,

Resolved, That a committee of three be appointed to memorialize the State Medical Society to take such measures as its wisdom may dictate to maintain the honor and position of the medical profession, and also to express to our member in Congress the decided disapprobation by this Society of such an unwise innovation.

On motion of Dr. White, of N. Y., the communication was laid on the table, until a committee from the Academy of Medicine should have an opportunity to present a series of resolutions having a similar import.

The Society then, on motion of Dr. Griscom, adjourned to meet at 3 P.M.

TUESDAY AFTERNOON.

The Society was called to order at 3 P.M.

PARALYSIS AFTER DIPHTHERIA.

Dr. Bissell, of Utica, read a paper on "Reflex Paraplegia, as a sequel of Diphtheria." He supported the idea

that the paralysis was the result of an altered nutrition in the periphery of the sentient nerves, affecting secondarily the spinal cord by reflex action. The amount of fatality of the cases which had come under his observation, was about five in nine. The treatment consisted of tonics and stimulants. A dorsal decubitus was strongly insisted upon, in order to allow the blood to gravitate to the spinal cord; and the indications in this particular were further carried out by dry frictions, warm flannels, and the internal use of strychnine, etc.

Dr. Curry, of Westchester, was surprised at the average mortality in Dr. Bissell's cases. He had never met with a fatal case in his own practice, and he was himself an example of a cure of the disease, after having suffered from it for a period of three or four weeks. Rather accidentally he found that a relief from, and in fact a total disappearance of the unpleasant symptoms could be had by exposure to cold, and the administration of a moderate amount of whiskey. He agreed entirely with the views expressed by Dr. Bissell in regard to the character of the affection.

Dr. French, of Rome, had seen several cases of the discase under discussion, but they had all recovered.

Dr. Marsh, of Onondaga, had met with four cases of paralysis. Two of these terminated fatally. He had frequently met with convalescent cases of diphtheria attended with slight amaurosis, and very many that suffered from paralysis of the bladder, as shown by the retention of urine.

Dr. Govan, of Rockland co., stated that out of a large number of cases of diphtheria reported from Rockland co., he did not recollect a single case of paraplegia.

Dr. D'Avignon, of Clinton co., thought that the paralysis of the velum was dependent in a great measure upon the length of time that the deposit remained upon it.

Dr. Curwen, of Wayne co., had seen but two cases of paralysis, and they both died.

Dr. Taylor, of Onondaga co., had not known of a case of paraplegia occurring in his county, notwithstanding diphtheria had been very prevalent.

Dr. Garrish, of New York. stated that he had frequently met with cases of paralysis similar to those referred to by the other gentlemen, and had found that stimulating frictions, in conjunction with tonics, were attended with the best of results.

FUNCTION OF THE LARYNX.

Dr. Porter, on behalf of Dr. Boulware of Albany, presented a specimen of wound of the throat, through the crico-thyroidean membrane, followed by occlusion of the breathing tube at that point. The person from whom the specimen was removed, was a female æt. 23, who, during an attack of temporary insanity, endeavored to destroy life with a razor. The cut was not an extensive one, and no vessels of large size were wounded. The lips of the wound were brought together, and in the course of three weeks the parts had all healed with the exception of a small opening in the trachea just below the cricoid cartilage. An attempt was made to close this opening, but very soon mucus collected in the tubes in such quantities as to render the removal of the dressings necessary in order to prevent suffocation. The tracheal tube was then introduced into the opening, and, with but slight intermission, was worn for several weeks. At the end of about eleven weeks from the infliction of the injury, the silver tube having been for some time removed, the wound closed, but it was found necessary on account of the collection of mucus in the trachea to open it again. No further attempt was then made to heal the wound, and it was found that she began to lose her voice, the aphonia being complete in the course of a few weeks. At this time, by closing the opening in the trachea, breathing would be stopped, proving that air could not pass through the larynx. Notwithstanding she had no voice, she could make herself intelligible by whisper sounds. She eventually died nineteen months after the receipt of the wound in consequence of suffocation, induced by the collection of quantities of mucus in her breathing tubes. The case was one which illustrated, in quite a satisfactory manner, the important and essential part which the larynx plays in the formation of the voice, while, at the same time, it proved that the laryngeal voice is not essential to the formation of whispers.

On motion, the Society then adjourned to meet on Wednesday, 10 A.M.

Correspondence.

THE FIFTY-FIFTH ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

The Medical Society of the State of New York has commenced its session. Albany is now thronged with medical men from every section of the State, and those persons who are expected to be informed upon such matters, say that the attendance is fully as large as at any previous occasion. The meeting was called to order at 11 o'clock, on Tuesday, February 4th. The President elect, Dr. E. H. Parker, of Poughkeepsie, is a person who promises to be everything that a presiding officer can be, yet I fear that before the session closes his patience will be not a little tried by some of the members, who are determined to talk, whether it be in order or out of order. During the morning session a considerable amount of business of minor importance was disposed of, and were it not for Dr. Finell, of New York, who exhibited some interesting pathological specimens, the members would have gone away unprofited. At the meeting in the afternoon Dr. Bissell read a paper on "Reflex paraplegia after diphtheria.' Some discussion followed in which several prominent members took an active part, and every thing seemed to be going on finely, when a gentleman from New York, who evidently had not listened to the reading of the paper, proceeded to favor the members with his views concerning the difference which existed between diphtheria and croup. The symptoms, treatment, prognosis, in fact everything connected with diphtheria, were freely talked over except the paraplegia, of which the paper treated. Although widely different views were expressed in relation to the pathology of this throat disease, all agreed that the tonic course of treatment was the only reliable one. The current of the discussion upon the paper being thus turned from its legitimate channel lost all interest to the majority of members present, and they were heartily glad when the next order of business was announced. The afternoon being advanced, after the reading of a paper by Dr. Porter, containing the details of a wound of trachea, in which the voice-producing function of the larynx was proven, the Society adjourned until the morrow morning at 10 o'clock.

A great deal of business is expected to be transacted on Wednesday, very many papers of interest being promised. Dr. Swinburne has prepared a paper upon the case of suspected murder, already set before your readers by Dr. Clark. It will be recollected that Dr. Swinburne was on the side of the prosecution, and of course views the case in altogether a different light from the distinguished Professor of Medicine. Dr. Clark, in all probability anticipating the intention of Dr. Swinburne, has caused to be sent in pamphlet form for distribution among the members the results of his own investigations upon the subject, in order that a fair comparison may be drawn between the statements of each party. Dr. Swinburne confidently expects to confute the statements of Dr. Clark, but we shall see how those expectations are to be realized.

Dr. Griscom is here from N. Y. in labor with his Health Bill, but judging from hearsay I fear the result will be a still-birth. Let every good sanitarian pray that such will not be the case.

Surgeon-General Vanderpoel and Dr. Swinburne ex-

pect to entertain the Society at their respective residences on Wednesday evening. The feelings of the Albany physicians as a class are very cordial towards the Society, and were its sessions sufficiently prolonged I am conscious that entertainments would not be wanting. The Secretary, Dr. Willard, is perfectly overrun with Society business, and it is wonderful to see with what equanimity of temper he discharges all the duties of an office so filled with little vexations.

Hoping that these few notes by the way may be of some use to you I close for the present.

Yours, etc.

Reetus.

Albany, Feb. 4, 1862.

NAVAL MEDICAL BOARD.

The Naval Medical Board, which has been in session since the beginning of summer, having completed its duties, was dissolved by order of the Navy Department on the 27th January.

The Board, as originally organized, consisted of,
Surgeon Samuel Barrington, President;
Surgeon John A. Lockwood, Member;
Surgeon Charles H. Wheelwright, Member;
Pd. Asst. Surgeon, John T. Taylor, Recorder.

In August, Dr. Barrington was relieved on account of illness, and Dr. Lockwood has since presided. About the same time, Dr. Taylor having been promoted to the rank of Surgeon, was appointed a Member of the Board. The names of the successful candidates examined in July and August have already been published. These gentlemen are now all at sea. They supplied vacancies created by resignations, and other casualties. At the extra session of Congress, the numerical force of the medical corps was considerably increased, to meet the war demand. The following are the names of those found qualified by the Board to fill the vacancies thus created. They are arranged in the order of merit as determined by the Board, and affixed to each name, the State from which appointed, and the medical school upon which the candidate has been in attendance.

No. 1. Robert T. Edes, Mass., Harv. Univ.
" 2. John D. Murphy, N. Y., Univ. N. Y.
" 3. Edgar Holden, N. J., Col. P. & Surg., N. Y.
" 4. R. E. Van Giesen, N. J., " " " "
" 5. Thomas C. Walton, N. Y., McGill Col., Montreal.
" 6. Benj. H. Kidder, Mass., Long Island Med. Col.
" 7. Lewis Zinzin, N. Y., Heidelberg Univ.
" 8. G. H. E. Baumgarter, Mo., S. Louis Med. Col.
" 9. John Homans, Jr., Mass., Harv. Univ.
" 10. John H. Clarke, N. H., Harv. Univ.
" 11. Greenville S. Slough, Pa., Jeff. Med. Col.
" 12. Samuel R. Foreman, N. J., Col. P. & Surg., N. Y.
" 13. Wm. B. Gibson, Mass., Harv. Univ.
" 14. Geo. W. Woods, Mass., Univ. Virginia.
" 15. Adolph A. Hoeling, Pa., Univ. Penna.
" 16. James J. Allingham, N. Y., Col. P. & Surg., N. Y.
" 17. Charles E. Steadman, Mass., Harv. Univ.
" 18. Wm. F. Tevey N. Y., Univ. N. Y.
" 19. C. J. S. Wells, Vermont, Univ. Vermont.
" 20. Charles J. Habbard, Ohio, Harv. Univ.
" 21. Wm. K. Van Keypair, N. J., Univ. N. Y.
" 22. Joseph Hugg, N. J., Jeff. Med. Col.
" 23. F. B. A. Lewis, N, Y., Harv. Univ.
" 24. Wm. Brown Mann, N. Y., Buffalo Univ.
" 25. Saml. W. Abbott, Mass., Harv. Univ.
" 26. Luther M. Lyon, Pa., N. Y. Med. Col.
" 27. Wm. S. Fort, N. J., Univ. Penna.
" 28. Charles H. Giberson, Vermont, Univ. Vermont.
" 29. Charles H. Perry, R. I., Univ. Penna.
" 30. Thomas Hiland, N. H., Dartmouth Med. Col.
" 31. Daniel M. Skinner, N. J., Univ. N. Y.
" 32. D. K. Bannon, Pa., Univ. Penna.
" 33. David T. Ricketts, Md., Univ. Md.
No. 34. Thomas L. Patrick, Md., Univ. Md.
" 35. Joseph A. Babier, Mass., Harv. Univ.
" 36. Saml. N. Brayton, Mass., Col. P. & Surg. N. Y.
" 37. Edw. C. Vermeulen, N. J., " " " "
" 38. Wm. T. Plant, N. Y., Univ. Mich.
" 39. Wm. Chalmers, N. Y., Col. P. & Surg., N. Y.
" 40. Charles H. White, Mass., Harv. Univ.
" 41. George T. Shipley, Mass., Harv. Univ.
" 42. Isaac H. Hazelton, N. H., Harv. Univ.
" 43. James H. Mears, Pa., Univ. Penna.
" 44. Benj. F. Pierce, Maine, Harv. Univ.
" 45. Newton H. Adams, N. Y., Albany Med. Col.
" 46. Edward Kersner, Md., Univ. New York.
" 47. Stephen H. Clarke, N. Y., " "
" 48. Charles Carter, N. Y., Col. P. &. Surg., N. Y.
" 49. Thomas N. Penrose, Pa., Univ. Penna.
" 50. J. Henry Gunning, N. Y., Univ. New York.
" 51. Edward A. Pierson, N. J., Col. P. & Surg., N. Y.
" 52. Watson C. Hall, N. Y., Geneva Med. Col.
" 53. George R. Brush, N. Y., Col. P. & Surg., N. Y.
" 54. Heber Smith, N. Y., " " " "
" 55. Edward D. Payne, Pa., Jeff. Med. Col.
" 56. Edward K. Dodge, Pa., Phila. Med. Col.
" 57. Ira A. Bragg, Mass., Harv. Univ.
" 58. George D. Storme, N. Y., Buffalo Univ.
" 59. John D. Ackley, Pa., Univ. Penna.

The following reported after the vacancies were filled as above. They will be appointed as vacancies occur.

No. 1. Edward S. Olcutt, Ky., Univ. N. Y.
" 2. John T. Luck, Iowa, Harv. Univ.

DEATH OF MR. RUFUS DELAFIELD, MEDICAL CADET, U. S. ARMY.

At a meeting of Medical Cadets, U. S. Army, held in Washington, D. C., Jan. 20th, W. D. Day, of the General Hospital, Alexandria, was elected Chairman, and H. A. Robbins, of the Circle Hospital, Washington, Secretary. Messrs. Paine, Davis, and Bodman, were appointed a committee to draft resolutions on the death of Medical Cadet Delafield, and presented the following, which were unanimously adopted:—

Whereas it has pleased the Supreme Ruler of events to remove from our midst by death, Medical Cadet Rufus Delafield, of New York city, therefore

Resolved, That we bow in humble submission to this decree of an all-wise Providence, recognising in the event the hand of "Him who doeth all things well."

Resolved, That in the death of Cadet Delafield, the corps has lost an efficient and faithful member, the science of medicine an earnest and enthusiastic student, and the profession one of its most promising aspirants.

Resolved, That we will ever cherish the memory of the many virtues of the deceased, and imitate his patriotic devotion, his scientific zeal, and his uniformly kind and Christian deportment.

Resolved, That we extend to the bereaved relatives and friends of the deceased our sympathy and condolence in this dark hour of their trial, and commend to them the consolation that comes from a higher than human source.

Resolved, That we wear the usual badge of mourning for thirty days, and that a copy of these resolutions, signed by the chairman and secretary, be sent to the family of the deceased, and to the medical and other journals for publication.

W. D. Day,
H. A. Robbins,
Medical Cadets, U. S. Army.

In the *Dublin Medical Press*, Dr. Thomas Davis describes "a case of extra-uterine fœtation of eight years and three months standing, counting from the expected period of delivery. The fœtus was successfully removed by operation."—*British Med. Jour.*

TO CORRESPONDENTS.

Communications have been received and placed on file for publication, from Dr. E. M. Hunt, N. J.; Dr. J. Kncelaud, N. Y.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 27th day of Jannary to the 3d day of Febrnary, 1862.

Deaths.—Men, 82; women, 83; boys, 119; girls, 106—total, 389. Adults, 165; children, 224; males. 200; females, 189; colored, 5. Infants under two years of age, 136. Children reported of native parents, 18; foreign, 105.

Among the causes of death we notice:—Apoplexy, 6; Infantile convulsions, 29; cronp, 15; diphtheria, 9; scarlet fever, 45; typhus and typhoid fevers, 4; cholera infantum, 0; cholera morbus, 0; consumption, 63; small-pox, 12; dropsy of head, 9; infantile-marasmus, 16; diarrhœa and dysentery, 0; inflammation of brain, 8; of bowels, 5; of lungs, 33; bronchitis, 5; congestion of brain, 5; of lungs. 6; erysipelas, 2; whooping cough, 6; measles. 4. 227 deaths occnrred from acute disease, and 25 from violent causes. 203 were native, and 126 foreign; of whom 84 came from Ireland; 1 died in the Immigrant Institution, and 41 in the City Charities; of whom 14 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Jan. & Feb. 1862	Barometer.		Temperature.			Difference of dry and wet bulb. Therm.		Wind.	Mean amount of cloud.	Humidity. Saturation, 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In	°	°	°	°	°			
26th.	30.00	.60	30	27	33	4	6	N.W.	0	
27th.	30.31	.11	30	25	35	4	6	N.W.	1	
28th.	30.20	.11	26	22	30	3	5	N.	5	
29th.	30.00	.21	28	22	35	½	1	N.E.	10	
30th.	29.91	.24	33	31	40	2	3	N.	8	
31st.	30.21	.30	29	26	34	5	8	W.	1	
1st.	30.14	.10	27	26	31	3	4	N.E.	10	

Remarks.—26th, Fresh wind all day. 27th, Fresh wind A.M. 28th, Snow storm commenced at 3 P.M. 29th, Rain and sleet early A.M. Fog on the river P.M. 30th, Rain A.M., light rain in the afternoon, clear late P.M. 31st, Dryest day of the month, excepting the 1st. Amount of rain, melted snow, etc., for the week, including Feb. 1st, one inch and a quarter.

METEOROLOGICAL REPORT.

Summary of Meteorological Observations, January, 1862.

	Degrees.
Mean temperatnre for the month	28¾
" " at 6 A.M.	26
" " at 10 A.M.	30
" " at 2 P.M.	
" " at 6 P.M.	28
" " at 10 P.M.	
Mean temperature of evaporations at 6 A.M.	25½
" " " at 10 A.M.	
" " " at 2 P.M.	27
" " " at 6 P.M.	
" " " at 10 P.M.	26
Mean minimum temperature	23
" range	10
" maximum temperature	33
" temperature of evaporation	26
Minimum temperature in the month	8
Maximum " " "	42
Minimum " of evaporation	6
Maximum " "	41
Mean weight of vapor in a cubic feet of air	
Minimum " " " " "	
Maximum " " " " "	
Mean height of barometer at 6 A.M.	30.01
" " " at 2 P.M.	30.00
" " " at 10 P.M.	30.03
Mean height of barometer for the month	in. 30.01
Minimum " "	29 34
Maximum " "	30.67
Inches of rain (very great)	7
Days of Easterly winds	16
" Westerly winds	15
Days mostly clear	11
" " clondy	20
" " of rain	12

Remarks.—Heavy gales on the nights of the 1st and 24th. The last commenced with hail at 8 P.M., and continued with rain storm on the 25th, four inches rain fell during that week—much fog and rain during month.

Sent Free by Mail on Receipt of Price.

Operative Surgery, adapted to the Living and Dead Subject, by C. F. Maunder, M.D. 12mo. London, 1861. $1.87.

Baillière Brothers, 440 Broadway, N. Y.

MEDICAL DIARY OF THE WEEK.

Monday, Feb. 10.	New York Hospital, Dr. Halsted, half-past 1 P.M. Bellevue Hospital, Dr. Thomas, half-past 1 P.M. Eye Infirmary, 12 M.
Tuesday, Feb. 11.	New York Hospital, Dr. Parker, half-past 1 P.M. Bellevue Hospital, Dr. Loomis, half-past 1 P.M. Opthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
Wednesday, Feb. 12.	New York Hospital, Dr. Cock, half-past 1 P.M. Bellevue Hospital, Dr. Sayre, Is. Hos., half-past 1 P.M. Eye Infirmary, 12 M.
Thursday, Feb. 13.	New York Hospital, Dr. Halsted, half-past 1 P.M. Bellevue Hospital, Dr. Taylor, half-past 1 P.M. Opthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
Friday, Feb. 14.	New York Hospital, Dr. Parker, half-past 1 P.M. Bellevue Hospital, Dr. Flint, half-past 1 P.M. Eye Infirmary, 12 M. Eye Infirmary, Dr. Noyes's Lectnre, half-past 1 P.M.
Satnrday, Feb. 15.	New York Hospital, Dr. Cock, half-past 1 P.M. Bellevue Hospital, Dr. Wood's Clinic, 1 P.M. Opthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Wade & Ford are now manufacturing DR. JOSEPH H. VEDDER'S walking splint for Morbus Coxarius.

Rensselaer Polytechnic Institute, Troy, N. Y.—The seventy-sixth semi-annual session of this Institution for instruction in the Mathematical, Physical, and Natural Sciences, will commence Feb. 19th, 1862. A full course in Military Science is now in progress.

Further information, with the Annual Register, can be obtained of Prof. Charles Drowne, Director.

Sent Free by Mail on Receipt of Price.

A Practical Treatise on Military Surgery. By Frank Hastings Hamilton, M.D., author of a Treatise on Fractures and Dislocations, Surgeon-in-Chief to the Long Island College Hospital, Surgeon to the Bellevue Hospital, New York. Professor of Military Snrgery and of Diseases and Accidents incident to Bones, in the Bellevue Hospital College. 8vo. Price, $2 00.

This work embraces a consideration of the Examination of Recruits, the Hygiene of Troops, relating to Diet, Dress, Exercise, &c.; Accommodation of Troops in Tents, Huts, Barracks, &c.; the Construction and Location of Hospitals; Preparations for the Field; Flying Ambulances, Litters, &c., also, Gunshot Wounds, Amputations, Hospital Gangrene, Scurvy, &c. United States Army Regulations, with many other matters pertaining to Military Surgery.

Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

On Diphtheria, By Edward Headlam Greenhow. 1861. Pp. 160. Price, $1.25.

Our readers will find a very large amount of information in the twelve chapters of which the volume is made up. Perhaps, in the present state of our knowledge on the subject of this obscurely understood disease, little more can be said beyond what may here be found written down.—*London Medical Times and Gazette.*

We have only been able here to refer to certain of the more prominent facts concerning diphtheria; but we believe we have said enough to recommend this well-written treatise to the attention of the profession.—*British Medical Journal.*

Baillière Brothers, 440 Broadway.

Sent Free by Mail on Receipt of Price.

Text-Book on General Physiology

For the use of Schools.

A KNOWLEDGE OF LIVING THINGS WITH THE LAWS OF THEIR EXISTENCE. By A. N. Bell, A.M., M.D. One handsome volume of 318 pages, 12mo, illustrated by sixty wood engravings and two colored plates. Price One Dollar.

N.B.—The work was originally published at $1.50. It is *reduced in price* so that it may compete more favorably with other Text-Books.

Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

A Treatise on Diseases of the Joints, by Richard Barwell. 8vo. London, 1861. $3.75.

Baillière Brothers, 440 Broadway.

Sent Free by Mail on Receipt of Price.

Ten Lectures Introductory to the Study of Fever, by A. Anderson, M.D. Post 8vo. London, 1861. $1.55.

Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

A Treatise on the Surgical Diseases of the Eye. By H. Haynes Walton. Second Edition, 8vo. London, 1861. $4.35.

Baillière Brothers, 440 Broadway, N. Y.

TO THE MEDICAL PROFESSION.

HAVING devoted my time and attention to the treatment of

SPINAL DISEASES,

for the last six years, examining closely the results that have followed, I am now prepared to show that a cure in

POTT'S DISEASE OF THE SPINE,

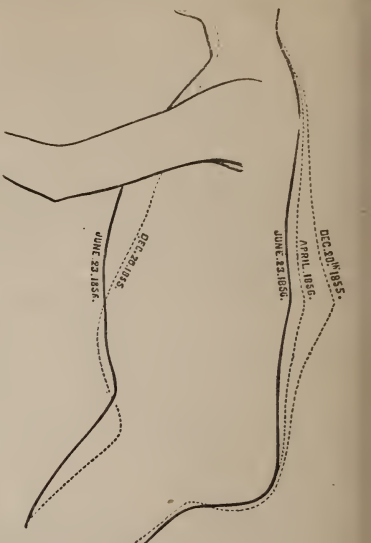
may not, in all cases, NECESSARILY consist of CURVATURE, as is generally maintained; but, that the further progress of the curvature may generally be arrested from the time treatment commenced, and, in recent cases, a cure effected, with the curvature nearly or quite removed by appropriate mechanical appliances and the internal use of medicinal agents, to the entire exclusion of setons, issues, or any other counter-irritant, or even recumbent position.

The accompanying cut represents the outlines of a case, at different periods, under treatment. I was called to attend in December, 1855.

Boy, nine years old, son of Dr. ——, New Bedford, Mass. Scrofulous diathesis; lower extremities powerless, and form much emaciated. The pain was severe, and the patient greatly prostrated.

Treatment.—Efficient support to the spinal column. Galvanism, applied by friction, and tonics.

Relief from pain, on the application of the apparatus, was immediate and complete, and the recovery rapid. The slight deformity existing when the last outline was taken has since *entirely* disappeared.



"Having examined the SERPENTINE SPRING APPARATUS, used by Dr. J. A. WOOD, in the treatment of Curvatures of the Spine, we recommend it as efficient and comfortable to the patient.

"HENRY J. BIGELOW, M.D., Professor of Surgery, Harvard University.
"GEO. HAYWARD, M.D., Ex-Professor of Surgery, Harvard University.
"WINSLOW LEWIS, M.D., Boston, Mass.
"J. V. C. SMITH, M.D., Boston, Mass.
"JOHN W. WARREN, M.D., Boston, Mass."

REFERENCE.

WILLARD PARKER, M.D., Professor of Surgery, College of Physicians and Surgeons, New York.
JOHN T. METCALFE, M.D., Professor of Institutes and Practice of Medicine, University of New York.
STEPHEN SMITH, M.D., Professor of the Principles of Surgery, in the Bellevue Hospital Medical College.
GEORGE MARVIN, M.D., Brooklyn, N. Y.
H. I. BOWDITCH, M.D., Boston, Mass., Professor of Clinical Med.
SAML W. THAYER, JR., M.D., Professor of Anatomy in the University of Vt.
JAS. H. CROMBIE, M.D., Derry, N. H.

It is not expected nor even *desired* that Physicians who refer their patients to Dr. Wood, should give up the management of their cases, *except* so far as relates to the *mechanical* part of the treatment.

J. A. WOOD, M.D.,
No. 31 *Cooper Institute, N. Y.*

Mason's Sponge Tents and Compressed SPONGE have been in use for the past three years by many of the leading physicians of New York, and are pronounced far superior to, while the price is considerably below that of the imported.

For sale in boxes of one dozen assorted sizes, or singly, by the Manufacturer at 251 Eighth Avenue, N. Y.; Schieffelin Brothers & Co., 170 William street; Tiemann & Co., 63 Chatham street; Otto & Reynders, 58 Chatham street; Wade & Ford, 75 Fulton street; Caswell, Mack & Co., Fifth Avenue Hotel.

MANUFACTURED BY

A. MASON, DISPENSING CHEMIST,

251 Eighth Avenue, cor. Twenty-third st., N. Y.

Dr. Squibb's preparations invariably used, and every possible attention given to the Dispensing Department. Trusses, Elastic Stockings, Female Supporters, Shoulder Braces, etc.

Pharmaceutical Granules and Dragees (*Sugar-Coated Pills*)—of

GARNIER LAMOUREUX & CO.,

Members of the College of Pharmacy, Paris.

ALL THE PILLS OF THE U. S. PHARMACOPŒIA.
ALL PREPARATIONS OF IRON, QUININE, SANTONINE, ETC.
ALL THE COMBINATIONS OF COPAIBA, CUBEBS, ETC.
ALL THE ALKALOIDS IN GRANULES OF 1-5 TO 1-50 OF A GR.

These Pills are all covered with a coating of sugar, and present great advantages in the quadruple point of view, of the exactness of the weight of the medicine, of its perfect preservation, its convenient and agreeable administration, and, above all, its sensibly increased therapeutic action in the form of Dragees.

Agent for the United States, F. A. REICHARD,
61 Walker Street, a few doors West of Broadway, New York.

Sent Free by Mail on Receipt of Price.

Essays and Observations on Natural HISTORY, ANATOMY, PHYSIOLOGY, PSYCHOLOGY, AND GEOLOGY, by John Hunter, F.R.S.; being his Posthumous Papers on those subjects, arranged and revised, with notes: to which are added the Introductory Lectures on the Hunterian Collection of Fossil Remains, delivered in the Theatre of the Royal College of Surgeons. By Richard Owen, F.R.S., D.C.L. 2 vols. 8vo. London, 1861. Price, $10.00.

BAILLIERE BROTHERS, 440 Broadway.

To Physicians.—Timolat's Old Established SULPHUR AND VAPOR BATHS. Introduced in 1820 by L. J. TIMOLAT, from Paris, at No. 1 Carroll Place, Bleecker street, corner of Laurens street, New York. Given daily by

A. L. TIMOLAT & CO.

MEDICAL AGENCY,

440 BROADWAY, NEW YORK.

Mr. J. P. Richardson begs to announce to the Medical Profession that he has established an Agency for the transaction of business with medical men. He will purchase or sell any articles required by Country Physicians, as Books, Instruments, Vaccine Matter, etc., etc., and transmit them expeditiously, at the following rates: 10 per cent on the purchasing price, if under $5.00, and 5 per cent. on all sums over. He will promptly furnish as reliable information as can be obtained in regard to Schools, Colleges, Instruments, Books, etc., etc., for the sum of 25 cents for each article or item required. He is also prepared to negotiate, on the most favorable terms, the sales of Country Practices, obtain Partners or Assistants, collect accounts, or transact any business relating to the Profession. Terms subject to negotiation.

No additional charge will be made except for advertising, when required for the more advantageous transaction of the business in hand.

References—Editors American Medical Times; Jno. E. White, Esq., Warden of Bellevue Hospital, N. Y.; Prof. B. Silliman, Jr., New Haven.

Office hours from 12 to 1.

Address J. P. RICHARDSON,
Care Baillière Brothers, 440 Broadway, New York.

Sent Free by Mail on Receipt of Price.

Traite d'Anatomie Pathologique Generale. Tome 4 in 8vo. Paris, 1861. $2.35.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

A Manual of Etherization:

Containing Directions for the employment of Ether, Chloroform, and other Anæsthetic Agents by Inhalation in Surgical Operations, intended for Military and Naval Surgeons, and all who may be exposed to surgical operations; with Instructions for the Preparation of Ether and Chloroform, and for testing them for impurities; comprising also a brief history of the Discovery of Anæsthesia. By CHAS. T. JACKSON, M.D., F.G.S.F. 12mo. Boston, 1861. 75 cents.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

Original Lectures.

CLINICAL LECTURES ON THE PUERPERAL DISEASES.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE.
By B. FORDYCE BARKER, M.D.,
PROFESSOR OF MIDWIFERY AND DISEASES OF WOMEN, ETC., ETC.

LECTURE II.

ON PUERPERAL CONVALESCENCE.

Gentlemen:—We now come to the second period of puerperal convalescence, or that period during which the function of lactation rises to its highest point of activity. It is scarcely necessary for me to tell you that the breasts and nipples are the organs directly connected with this function, and that the preparation for it commences at an early period of pregnancy. During the second and third months the nipple swells, and becomes more erectile, sensitive, and projecting, and often of a deeper color. Then the skin around the nipple is gradually discolored, varying in depth of shade, intensity of discoloration, and extent of surface; and these changes increase with the advancement of gestation. In some women, almost as soon as conception has taken place, the breasts become tender and large, and this enlargement is accompanied with pricking sensations or even positive pains. This swelling sometimes diminishes during the fourth or fifth month, again reappearing larger than before near the end of pregnancy. You should also be aware of the fact, that there is a liability to two variations from the normal modifications which occur in the breast during pregnancy. First, the functional activity of preparation in a few individuals may be so exaggerated as to produce fever, analogous to what is called the milk fever after confinement, and may even be carried to the extent of producing inflammatory engorgement, followed by an abscess. Secondly, the breasts may at first enlarge, but afterwards the tumefaction may subside, and they may remain flaccid and soft until after delivery. You may remember, that in my lecture on abortion, I mentioned the decrease in size and flaccidity of the breasts, as one of the signs of the death of the ovum, but please bear in mind that I spoke of it as one of the signs in conjunction with the others enumerated, and not as a pathognomonic sign, taken alone, of this event. But this sign is not a good one, even when the ovum is not dead, for, according to Donné, women in whom this condition of the breasts occurs prove very poor nurses, on account both of the bad quality and small quantity of their milk; and in my own experience, I have several times verified the correctness of the assertion. The secretion of milk in the breasts frequently commences as early as the fifth month of pregnancy, and some women are quite annoyed by the running out of the milk in the latter months of gestation. After delivery, the breasts yield on suction a thin watery fluid, of a yellowish color and sweetish taste, which has received the name of colostrum, which is admirably adapted to form the first nourishment of the infant, as it is slightly laxative, and well fitted to unload the bowels of its viscid green contents, called meconium. The full development of the function of lactation is not ordinarily attained until forty-eight or seventy hours after delivery, and in some a still longer period is required for this end. In connexion with this development, we sometimes meet with a combination of symptoms which, in their aggregate, have been designated as

MILK FEVER.

These symptoms may be tersely described as follows:—Headache, heat and dryness of the skin, succeeded in a few hours by copious perspirations (and sometimes, though more rarely, preceded by slight shiverings), a flushed face, thirst and loss of appetite, slightly furred tongue, with painful and distended breasts, sometimes to such a degree as to incommode and render painful the respiratory movements. In some cases, although this does not often occur, these symptoms are ushered in with a severe rigor, followed by profuse perspiration. Although this statement is in opposition to the assertion of most obstetrical authors, I feel well assured that I am warranted by my experience in making it, and it has this important bearing: a chill does not of itself alone prove that some graver post-partum inflammation or puerperal fever has attacked the patient. It is not always so easy to make out the differential diagnosis between milk fever and the more severe and dangerous puerperal diseases, especially when there is an epidemic tendency to the latter, as you might be led to suppose from the flippant and positive statements of some of our standard obstetrical authorities, or perhaps it would better become me to say, I have not always found it so.

It is true, as a general proposition, that in milk fever we have the positive sign of painful and distended breasts, and the negative symptoms, viz. the absence of pain and tenderness on pressure over the pelvic organs, or of abdominal tympanites, and the pulse seldom rises in this ephemeral attack above 100 per minute. But I have seen milk fever associated with severe after-pains, with tympanites from intestinal irritation, with temporary arrest of the lochial discharge, and, as I before remarked, the attack has been preceded by a severe rigor. I have seen in our lying-in wards, in this hospital, severe and even fatal cases of the so-called post-partum inflammations, in which no pain has been complained of by the patient referable to the organ implicated, in which it was very difficult to find tenderness on pressure anywhere over the hypogastric or iliac regions, and in which, so far as could be ascertained by careful inquiry, there was no decided chill. I have seen here fatal cases of puerperal fever, in which neither the mammary secretion nor the lochial discharge has been arrested, nor has there been abdominal pain, or tenderness, or tympanites, neither has the facial expression given any indication of the existence of a grave disease. I have this session, called your attention to some such cases in our wards. I therefore say, that it is only by a careful analysis of all the symptoms, and not always then, until twenty-four hours have passed from the commencement of the attack, that I am able to assert, with absolute confidence, that I have to do only with a case of milk fever.

It was formerly supposed that milk fever generally accompanied the secretion of milk, but at the present day, from the great improvement in the hygienic management of those recently confined, and especially from the general practice, now common, of applying the child to the breast at an early period after delivery, milk fever is an exceptional incident of the puerperal state. But in some women, the secretion of milk is inevitably attended by more or less febrile reaction, and the most watchful care will not avert it. The prophylactic measures which are usually successful, are the following:—

1st. Secure, by every possible means, to your patient, some hours of sound and refreshing sleep, immediately after delivery. During labor, the vital forces have been stimulated to their maximum of intensity in order to accomplish the expulsion of the child. A period of complete repose is absolutely essential to prevent more or less violent reaction, which is naturally increased by the development of the new function of lactation.

2d. Apply the child to the breast as soon as the patient has recovered by rest and sleep from the exhaustion following labor. It was formerly the general practice not to do this until the second or third day, because it was said there was no milk, and now and then I meet with a nurse at the present day, who is disposed to make the same plea. Some writers direct that the child should be applied as soon as possible after the delivery of the after-birth, and that the accoucheur should never leave until after this is done; the argument for this rule being, that by this means, and by

this means alone, is the patient secured from the danger of post-partum hæmorrhage. But, with all due deference to the opinion of others, it seems to me that the cases, where this rule should be followed, are exceptional ones. We have other methods of securing, by reflex action, the permanent contraction of the uterus, in those cases where the vital forces have not been exhausted by the labor, and where the hæmorrhage is great, and nerve power is worn out, the fatigue and excitement induced by the effort to make the infant nurse quite counterbalances the advantages that may result from it. But after the patient has had some hours of rest, there are many reasons for the sake of both mother and child why the latter should be at once and frequently applied to the breast. As it is the condition of the mother that we are now studying, it is sufficient for me here to say, that before the breasts are distended by the secretion of milk, the nipple can be more readily seized and drawn out, the flow through the lacteal tubes is more easily secured, the earlier secretion of milk is excited, and being drawn as fast as it is secreted, the breasts do not ordinarily become over distended by an accumulation of milk, the nipple is permanently elongated, and the liability to milk fever, abrasion, excoriation, fissure and inflammation of the nipple, and to milk abscess greatly diminished.

But, as I before remarked, notwithstanding these prophylactic means, the full development of the function of lactation is in some women always attended by more or less severe febrile reaction. The next question is, how shall we treat milk fever? 1st. The derivative effect of a laxative is required. Some say, in these cases always give a saline cathartic, but I would say, study the special indications of the case. A saline cathartic is not always best under these circumstances, and in a former lecture I have alluded to the principles which should guide you in the selection of a laxative. Absolute rules do very well for a mere routinist, and they save a great deal of wear and tear of mind in the medical practitioner, but they do not make good physicians. 2d. Reduce vascular excitement by sedatives. What indications is the following formula calculated to fulfil? R. Aq. aurantii flor. ℥ij.; syr. simp., spts. ether nit., āā, ℥j.; autimonii et potass. tart., gr. ij.; tinc. aconiti rad., gtt. xxx. M. S. a teaspoonful in a wineglassful of water every second hour. It is not necessary to wait for the action of the laxative before commencing the use of some such combination as the above. 3d. Direct the nurse to gently but thoroughly rub the breasts from the circumference towards the nipple, at least every two hours, until the painful distension has subsided. Of course you will not neglect to have the breasts often drawn, either by a child or a breast-pump, but take care in doing this not to permit the nipples or breast to be irritated. 4th. At night allay pain and nervous irritability, and secure sleep, by a diaphoretic anodyne. You may give eight or ten grains of Dover's powder for this purpose, but I am generally better pleased with the effects of the same dose of Tully's powder, the formula for which I have already given you. By such measures you will generally be able to overcome the symptoms of milk fever in twenty-four or thirty-six hours. But I ought to mention that I have one exceptional patient in whom the secretion of milk is accompanied with such violent vascular excitement and intense nervous irritability, amounting to delirium, that after her three confinements I have been compelled, in addition to the treatment I have just described, to resort to pretty copious venesection, and I may say here parenthetically, that this is the only patient that I have bled for nearly two years.

Lactation may be prevented or seriously interfered with by a variety of conditions that you should be aware of. It sometimes occurs that a woman may have large and handsomely formed breasts, but there is absolutely no secretion of milk. The mamma seems to be made up entirely of adipose, lacking the proper glandular development. After judicious measures have been tried for a sufficient length of time to demonstrate the impossibility of securing the lacteal secretion, all attempts for this purpose should be abandoned, as inflammatory action may be excited which will terminate in mammary abscess. Again, in other cases, the secretion is abundant enough but it is not retained. It runs out as fast as it is secreted, greatly to the annoyance of the mother and a serious deprivation for the infant. Very often this running out of the milk in a certain degree lasts for a short time and then gradually ceases, but when it takes place to the extent of depriving the child of its requisite nourishment, positive treatment is required to arrest this untimely flow. Astringents applied to the nipples have been recommended for this purpose, but I have never seen much good result from such applications. The only effective means to accomplish this, is compression of the whole breast, exclusive of the nipple, by strapping it with adhesive plaster for two or three days. The compression should be moderate in degree and equally applied over the whole breast in such a way as to keep it up, and an incidental benefit from this measure is that it tends to preserve the form of the breasts in their virgin beauty, a result which most women bear with exemplary fortitude.

DEPRESSED NIPPLES.

The absence of sufficient prominence for the child to seize hold of, is sometimes a serious obstacle to nursing. But by drawing out the nipples with the breast-pump, and the early and frequent application of the child to the breasts before they are distended by the secretion, and by wearing constantly, when the child is not nursing, the breast shells, as they are called, this difficulty is usually overcome.

But among the most troublesome, painful, and intractable of the conditions which interrupt normal lactation should be mentioned

SORE NIPPLES.

This term includes a variety of pathological conditions, as erosions and excoriations, inflammation and ulceration, cracks or fissures at the base of the nipple, and eczema, each of which requires a different treatment; and from the vague directions found in most of the obstetric text-books in regard to their management, I suppose that most young practitioners have found these among the most perplexing and unsatisfactory of all the minor pathological affections which they are called upon to treat in the puerperal woman. You will find in your standard authors a great variety of remedies mentioned as useful local applications in such cases; but when called upon to treat them, there is such a lack of everything like specific definite direction as to the choice of these remedies in any given case, that if your experience should be anything like mine, it will seem to you as if you were compelled to grope in the dark. Without stopping to discuss the value of all the different agents proposed as useful in these cases, I will only detain you by a concise statement of what my experience has led me to believe is the best method of treatment in each special condition.

EROSION,

Or when it is more extensive it is called *excoriation* of the nipple, is a superficial wound of the skin, in which the derm is laid bare by the removal of the epidermis by nursing. Sometimes it produces little vesicles, one or more, on the apex or sides of the nipple, which are broken by sucking, and the scabs from which are again pulled off, and we have what the nurses call the *chapped* nipples. From this results entire destruction of the derm, and we then have *ulceration* of the nipple. The surface is then of a bright red color, granulated, and frequently swollen, and grooved in fissures. When such a condition exists, you can readily understand that the act of nursing produces intolerable suffering, to such a degree that patients have often told me that the pains of labor could be more easily endured. I have sometimes seen half of the nipple bevelled off by this ulcerative process. But if you see the case sufficiently early, and treat it properly, and the nurse and patient scru-

pulously follow your directions, the ulcerative process may always be avoided. In the early stage of erosion and excoriation, direct that as soon as the child leaves the nipple it should be very carefully wiped dry, with a soft piece of linen, and then painted over by means of a camel hair brush, with the tinc. benzoin. co. Brush it over three or four times, allowing an interval of a minute or two for each application to dry. This forms a kind of artificial cuticle, which should be renewed each time that the child nurses, and if it is possible to make the child nurse through it, direct that a nipple shield should always be used. Very good ones are now kept by our apothecaries generally, but in selecting one, be careful that its base is sufficiently large and elastic, so as not to strangulate the nipple. The first application of the benzoin produces a little smarting and burning pain for a moment or two, but its renewal is not usually painful. If the ulcerative process has commenced, stop nursing from that nipple. There is no other way, and the more promptly you decide to do this, the more speedily will the nipple be cured, and very frequently it is not necessary to suspend the nursing more than twenty-four or thirty-six hours. Empty the breasts by gentle rubbing only. This can only be done by tact and perseverance, although it sometimes requires ten minutes to get the first few drops. Then paint over the ulcerated surface, twice a day, with a solution of nitrate of silver, gr. x., to ʒj. of distilled water, and keep the surface covered with carb. magnesia, or what I think is still better, calomel.

TISSUE OR CRACK

At the base of the nipple occasions intense suffering, often I have thought quite as severe as the form of sore nipple that I have just described. It sometimes is so small that it can only be seen in a good light by bending the nipple over to the opposite side. To cure it pencil the bottom of the fissure with a very fine point of the solid stick of nitrate of silver, and then cover it with collodion, that is the solution of gun cotton in sulphuric ether. If the fissure is not associated with the form of sore nipple that I have before described, or with inflammation of the nipple, that I am about to speak of, it is by these means cured speedily.

INFLAMMATION OF THE NIPPLE

Is sometimes a cause and in other cases a consequence of the preceding conditions, and the inflammation frequently extends to the areola. The nipple is conical, red, swollen, and excessively painful. Apply a soft bread and milk poultice for a few hours, and then keep it covered with one or two thicknesses of linen, wet in a weak solution of lead water, as for example:—℞. Liq. plumbi diacet. dil. ʒj.; aq. rosæ ʒiij.; M. ft. lotio. After the inflammation is so far subdued that nursing can be borne without much pain, you will do well to substitute for the lead water the following:— ℞. Aq. rosæ, glycerin., āā, ʒij.; acidi tannic. ʒij.; M. ft. lotio. I have described each of the above forms of sore nipples as distinct affections, but you should not forget that they may be associated, either two forms or the three together, when the treatment must be modified or combined according to the special indications.

ECZEMA OF THE NIPPLE,

Is, according to my experience, quite rarely met with, as I can only recollect six cases that I have seen. The first was in M. Velpeau's wards, at La Charité, in Paris. I have seen two cases in our lying-in wards, and three in consultation practice. Velpeau's prescription, which he said he had never known to fail, was the following ointment:—℞. Ung. aq. rosæ ʒj.; mag. carb. ɔij.; hydrarg. chlor. nitr. ʒj. M. You should direct the apothecary to rub it up very thoroughly, or it will be lumpy. This ointment cured in a few days the cases we had in this hospital, but I am not able to say how successful it was in the other cases.

Original Communications.

MEDICO-LEGAL POINTS IN A CASE OF SUSPECTED HOMICIDAL CUT THROAT,

AS PRESENTED AT A MEETING OF THE NEW YORK ACADEMY OF MEDICINE, HELD DEC. 18, 1861.

By A. CLARK, M.D.,

PROFESSOR OF PATHOLOGY AND PRACTICE OF MEDICINE IN THE COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

(*Continued from page* 73.)

DIRECTION AND CHARACTER OF WOUND.

To my own mind there is no fact in this case which is so opposed to the theory of homicide, as the particular character of the wound by which death was produced. Penetrating on the left side directly inwards towards the centre of the neck, cutting the muscles and deep tissues to the depth of nearly three-quarters of an inch, as far posteriorly as the skin, then terminating upon the right sterno-cleido-mastoid muscle, or rather a little beyond it, cutting the skin, and half an inch further than the muscle was cut; it is a wound which could not have been inflicted by a person standing on the left side of the body, and must have been made by the right hand, either of the woman herself, or of a person standing behind her, in such manner that his right hand might take the place of hers. The bed, as has been stated, was four feet four inches wide; the body of the woman occupied the left half, nearly or quite to the centre. There was no evidence that the bed had been moved, and no evidence of any other person but herself having been upon it. There was evidently not room for a person to take an attitude upon his knees at her right hand, and there inflict the wound, even had it been possible to have made such a cut in this attitude. Besides all this, a wound prolonged at its right extremity as this was, cannot be made by a person upon his knees, and so near to the body, facing it, as he must have been, had any part of this supposition been true.

The direction of the wound seems to be of some value in determining whether it was inflicted by herself or another person. The rule which applies to it seems to be received with many exceptions, and yet when a particular direction is observed, it equally seems that the authorities attach importance to it. Thus Briand and Chaudé (p. 266) state that almost always in a suicide the instrument is directed from left to right, and from above downwards, while in assassination, on the contrary, the wounds are ordinarily made from right to left, and from below upwards, if the assassin is in front of his victim. Dieffenbach (above cited) speaks of the frequency with which in suicidal cut throat the wound is directed from left to right, and from above downwards, saying also that these wounds are ordinarily single.

Taylor (p. 266) refers to this point in the following language:—"The direction of a wound has been considered by some to afford presumptive evidence sufficiently strong to guide a medical jurist in this inquiry. It has been remarked in most suicidal wounds which affect the throat, that the direction of the cut is commonly from left to right, either transversely or passing obliquely from above downwards. * * * * * * * * In left-handed persons, the direction of course would be precisely the reverse. Suicidal wounds are, however, subject to such variation in extent and direction that it is scarcely possible to generalize with respect to them; nevertheless an attention to this point may sometimes be of real assistance to the inquirer." Again (page 267) regarding the character of the wound he says: "Homicidal incisions, especially in the throat, are often prolonged below and behind the skin, forming the angles of a wound deeply into the soft parts; those which are suicidal rarely possess this character." The deceased and the accused are both right-handed.

POSITION OF THE BODY.

It will be remembered that little or no blood was described as having been seen below the upper border of the flannel dress that was next the skin on the chest, yet that there was a considerable spot of blood upon the sheet turned down upon the lower part of the body. The question of the position of this person when the wound was inflicted, whether seated or lying upon the bed, is one regarding which there is some doubt, and the question was raised whether it was possible to inflict this wound upon herself lying upon her back.

In my judgment this is the strongest point in the case for the prosecution, not because there is any difficulty in inflicting the wound, for there is none, as any one can convince himself by lying down either upon the floor or on a feather bed (the bed in this case was of feathers), and making the necessary motions; but because it is a position rarely chosen, and seems to offer fewer facilities to this kind of suicide than the sitting attitude. The body and head were found inclined a little to the right, but there is not even a probability that this was the position in which the wound was inflicted. There were certainly some movements after the fatal wound was received. There was more blood on the right side of the body than on the left. This would only show that the deceased turned to this position while the bleeding was yet free. Taylor (p. 284) remarks that, "If the throat be cut while a person is lying down, it is obvious that the blood will be found on either side of the neck and not extending down the front of the body. Few suicides cut the throat while in a recumbent posture, and the course which the blood has taken may, therefore, be rendered subservient to the distinction of a homicidal from a suicidal wound." Had it been shown in this case, that the wound was really inflicted while the woman was lying down, in my appreciation, the other circumstances are so controlling as to place this case among the "few suicides *who* cut the throat while in a recumbent posture."

LOSS OF BLOOD.

At one stage of this trial, while it yet appeared that the quantity of blood lost was inconsiderable, it became of importance to ascertain what was the smallest loss that had proved fatal in the recorded cases.

In the case of Augustus Dautun (Beck, ii. 141), murder was committed, and the body afterwards cut to pieces. Dupuytren stated that the wounds in the chest were mortal. The thorax contained four pounds of blood.

Mr. Watson mentions a case (quoted by Taylor, 298), in which the internal mammary artery of the left side was divided by a stab in the chest. The man died on the ninth day, and four pounds of blood were found effused in that side.

Mr. Gutteridge (*Lancet*, Oct. 31, 1846, p. 478) reports the case of a woman, aged thirty-six, who received a kick from her husband in the lower part of the abdomen, while she was in a stooping position. Seen by Mr. Gutteridge in three-quarters of an hour, she had lost from three to four pounds of blood. She was sinking, and expired a few minutes after his arrival. The wound was entirely external, the left crus clitoris having been crushed so as to expose its cavernous structure.

In Beck (ii. 365) it is stated that a young man, sixteen years old, was stabbed with a nail rod and died in three minutes. The blood lost was one and a half pounds. The thoracic aorta was found wounded

In the instance already cited, on the authority of Adelon, Dubois, Boyer, and Rami, it is reported that one pound of blood was lost. In this instance, however, it will be remembered there was congestion of the lungs, and blood in the air passages.

In Beck (ii. 348) it is reported on a Boston authority that a prisoner cut his throat, and died with the loss of a pint of blood. It is suggested, however, in this case, that air might have entered the jugular vein.

It would seem, then, that persons whose throats are fatally cut may die on the loss of a pound of blood, and it does not affect the question at issue that a circumstance other than the mere loss of blood aided to produce the death. The question is, What is the smallest loss of blood, which of itself alone, or complicated with other circumstances incident to such wound, may prove fatal in a cut throat? The question of how much blood the body naturally contains, though raised in this case, is in no manner essential to the issue.

Taylor (297), referring to some of these cases, says: "Females are more easily destroyed by hæmorrhage than males," and adds (p. 298), that according to Mr. Watson, the loss of five to eight pounds will ordinarily prove fatal, but that many persons will die from a much smaller loss; the rapidity of the flow exercising a great influence, as when a carotid is cut.

SUFFOCATION.

The circumstances which seemed to have been relied on as the proofs of suffocation, were: the alleged engorgement of the lungs, the pulmonary apoplexy, the bloody pleuritic effusion, the small quantity of blood supposed to have been discharged from the wound, a certain amount of oozing from the cut vessels at the time the wound was dressed by the physician, and the blood which was discovered in the dressings at the first post-mortem examination.

These have been all remarked on except the last. Regarding the quantity of blood lost, while it has been shown that any quantity from a pint upwards may be with other circumstances attending upon cut throats sufficient to destroy life, the course of the evidence showed a much larger quantity than was at first supposed. With reference to the oozing of blood from the cut vessels, the witnesses for the prosecution were not all of the same opinion as to its significance, one of the most experienced stating that blood would continue to flow for a considerable time after death, but chiefly from the veins. As a matter of fact, however, it did not appear that the oozing after death was considerable, making allowance for a clot which was found in the wound and washed out at the time of the dressing.

Taylor (p. 299) makes the following statement regarding this circumstance: "It must not be supposed that all the blood met with around the wounded dead body was actually effused during life. As soon as the heart's action ceases, the arteries pour out no more, but the blood, so long as it is fluid, that is from four to eight or ten hours, and the warmth of the body is retained, continues to drain from the divided veins and smaller vessels. The quantity thus lost is not very considerable, unless the veins implicated are large."

The dressings of the wound, as observed at the first post-mortem examination, appear to have been: 1. A bandage extending around the neck; 2. A compress laid over the closed lips of the cut; and 3. Some cotton-batting that had been placed in the wound. These, it is stated, were filled with blood. The interpretation at first given was that it was drainage from the vessels left full from suffocation, but on further consideration it was admitted that all the blood found there, and more, might have come from the cranial cavity, expelled after the development of gases by decomposition. The circumstances which seemed to weigh as negatives upon the same question were: the entire emptiness of the heart in all its cavities, the empty state of the large internal blood-vessels, both arteries and veins, the entire absence of static congestion and cadaveric lividity, as well as the unusual bloodlessness of every viscus of the body, the lungs, and probably the brain, excepted.

A circumstance already mentioned may weigh as evidence against the supposition that she was suffocated to death before her throat was cut, that is, the fact observed by one or more of the women (on laying out the body) that blood bubbles were noticed to rise out of the trachea. The trachea then was filled with frothy blood. This could hardly have been in the winter season, and within a few

hours of the death, had there not been breathing after the throat was cut, and after the blood had entered the air-tubes.

Another circumstance of great significance, was the entire absence of any marks of violence upon the surface of the body, even the slightest, excepting always the fatal wound. The suffocation of infants is easy, and is doubtless often effected without any marks that would lead even to the suspicion of murder. The same may be true of persons much enfeebled by disease or insensible from intoxication or narcotic drugs, but the case is very different with adults and persons not enfeebled or poisoned. The examination of the records will probably fail to show a single case in which a mark or marks, considerable or slight, have not been left upon the body of such persons. It may be the cartilage of the nose has been crushed, the larynx may have been broken; there may be marks of the nails, or scratches upon the cheek; the upper lip may be ecchymosed, and even tumefied; and marks of the fingers may be found upon the neck or face, or ecchymosis, more or less considerable, resulting from a struggle; upon almost any part of the body evidence of bruises and ecchymosis; but that an adult of ordinary strength can be suffocated without leaving some mark, seems almost impossible. The instance claimed as that most nearly free from such external evidences was that of Margery Campbell, suffocated by Burke. "In her the features were rather more turgid than natural, the lips dark, conjunctivæ much injected, a little blood in the left cheek apparently from the nostrils; scarf-skin under the chin much roughened, and the skin brown and dry where denuded; the hyoid bone and thyroid cartilage farther apart than natural by the stretching of the interposed ligaments." Thus when Prof. Christison stated that these circumstances would not of themselves alone justify the opinion that this woman was suffocated, he did not by any means say that there were no marks that might lead to the suspicion of suffocation. It must be further noted that no scratches or marks of resistance of any kind were proved upon the person of the accused; and in this connexion, it is proper to say that no stain of blood was found on his person, or clothing, or anything that was in habitual use by him, the razor only excepted.

The accused is slight in figure, exceeding in weight, that of his wife only by twenty-five or thirty pounds. The disparity of strength could not have been very considerable; it therefore may be fairly questioned whether he possessed the physical strength to accomplish homicide in this way.

It is true Taylor remarks (p. 822), that "there are rarely any considerable marks of violence externally," but he further states under the head of "Homicidal Suffocation" (p. 827), "Hitherto the cases that have come before our Courts of Law have been those of infants and of the aged and infirm, and persons enfeebled by illness;" and again (upon the same page), "Homicide by suffocation would not be attempted on healthy persons, unless they were in a state of intoxication, and thereby rendered defenceless. It is certain that most individuals would have had it in their power, unless greatly incapacitated by disease or intoxication, to offer such a degree of resistance as would leave upon their persons indubitable evidences of murderous violence." Again (p. 830), "Certain trials which took place some years since, clearly prove that individuals in a state of intoxication or infirmity, have been murdered by smothering, for the sake of the money derived from the sale of their dead bodies. It will be sufficient to mention the trials of Burke and McDougal in Edinburgh, and of Bishop and Williams in this metropolis (London). The victims were commouly destroyed by the murderer resting his whole weight upon the chest, so as to prevent the motions of the ribs, and, at the same time, forcibly compressing the nostrils and mouth by his hands to prevent the ingress of air." The case of Margery Campbell, just referred to, illustrates the kind of external evidences which this class of cases would be likely to furnish.

A curious instance illustrating the points here under consideration, is recited by Cazauvieilh (*Annales d'Hygiène*, xvi., p. 123). A man, twenty-nine years old, married at twenty-four, for three years gave no proof of conjugal affection, and then his wife only received once, in two or three years, some caresses; later, every spring, he experienced insomnolency, pain in the head and epigastrium, redness of the face and sadness. He then often spoke of death, and said, "He would hang himself, but would strike a good blow before that." When in bed with his wife, he would make very frequent attempts to strangle her, seizing her by the throat. If she disengaged one hand, he persisted in his attempt with the other. Not able to accomplish his design, he would tear her flesh. He renewed these efforts every spring for fifteen years. After a time there was less regularity in these excesses, but he became habitually irascible, unkind, and subject to exaltation of ideas.

These statements and circumstances lead to the conviction that strangulation, under the circumstances of this case, would not have been easily accomplished.

Finally, nothing of the subpleural ecchymosis, regarded by Tardieu & Bayard as characteristic of suffocation, was found in either post-mortem examination; nor was any bloody effusion found under the scalp or serous pericardium.

There are other points in this case that have been interesting to myself, which may perhaps be presented should the subject excite discussion, but I close the presentation of the case for the present, with the statement that this woman was habitually jealous of her husband to an extreme degree, and on two occasions, at least, had been insane.

DIFFICULT OBSTETRICAL CASES.

By GEORGE T. ELLIOT, Jr., M D.

PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM, CONSULTING PHYSICIAN TO THE NURSERY AND CHILD'S HOSPITAL.

(*Continued from Page* 417.)

CASE LXXXIII.—*Apoplexy in a Neonatus.*

Bridget Kearney, æt. 35, 2d labor (1st easy), commenced in Bellevue Hospital, Nov. 7, 1861, at noon, and terminated on the 9th at 10 A.M. Dr. Vedder, House Physician.

In this case the second stage lasted eight hours and fifteen minutes, male still-born child, nine and a half pounds. The child's head remained stationary in the outlet so long that Dr. V. sent for Dr. Barker to deliver, but the child was delivered by the unaided and powerful uterine contractions just before his arrival. The child gasped three or four times, but could not be brought to life. I superintended the post-mortem, which was made by Dr. Lowel, with the following result:—Great vascularity of brain, and effusion of currant-jelly-like blood over the convex surface of both hemispheres near the posterior fontanelle. This effusion was not excessive. Each ventricle was filled throughout its whole extent with a clot which had not lacerated the brain tissue, while in the centre of the cerebellum was a clot the size of a small gooseberry.

CASE LXXXIV.—*Suppuration of Thymus in utero.*

A woman entered Bellevue in the last month of pregnancy, as she asserted, exhausted, and with symptoms referable to the nervous system, which subsequently proved to be chiefly hysterical. Less than a week before her confinement (which was in every respect natural), I distinctly heard the foetal heart, which, however, could not be detected by Prof. Flint a few days subsequently. The child was still-born, small in size, well proportioned, without evidence of disease, and the epidermis only susceptible of being rubbed off between the shoulders, and there to a limited extent. The placenta and cord were normal. Microscopic examination by Prof. A. Flint, Jr. I superintended the post-mortem, which was carefully made by Dr. Cleaveland, and which furnished no cause for death, until I remembered that the thymus had not been examined. This, which was in every way natural in its external appearance, contained pus. The whole amount was about equal to a small salt-spoonful, and was examined microscopically by Dr. A.

Flint, Jr. The woman herself presents no evidence or history of syphilis, though, of course, we are unable to ascertain whether any paternal taint existed.

Case LXXXV.—*Puerperal Mania.—Bellevue Hospital.—Service of Dr. Geo. T. Elliot.—Reported by Francis R. Lyman, M.D., House Physician.*

"M—— L——, native of Ireland, æt. 21, single. Admitted September 10, 1861. Brought in by the police. From a woman who accompanied her the following history was obtained:—Patient, a robust, healthy Irish girl, was confined on the 1st inst., and after a short labor was delivered of twins. The mother and children did well until the 5th of September, when she began to complain of pain in her head. This pain she steadily complained of until the 8th, when, for the first time, she manifested symptoms of delirium, becoming unusually talkative, and exhibiting a flow of spirits quite contrary to that which she had shown for some days previous. The delirium became more violent, and on the 9th she attempted to take the life of one of her children. When she was admitted the delirium was so marked that she was taken to the cells. When first seen she presented the following symptoms:—On entering the cells she was found walking the room, stopping at intervals, and staring with a fixed gaze at the ceiling. She was constantly talking, calling her mother and other friends, repeating the same name in succession many times with great rapidity. Her attention was drawn for an instant as the cell door opened, but she immediately turned to the wall and continued her ravings. On being urged to go to bed she was afraid of injury, and with the same breath cried out that "her child had been killed," repeating it as before. Her face was flushed; eyes bright and sparkling; surface hot and dry. Her pulse was 120 and feeble in character. Abdomen flaccid. Uterus contracted, but larger than usual. She refused to protrude her tongue, and did so only after being repeatedly told to close her mouth. It was large, and coated with a white fur at the base. It was discovered that she was flowing, and a vaginal examination showed the os uteri to be patulous and dilated to the size of a quarter dollar. She was flowing very little, but it was constant. The vagina was of normal temperature and bathed with mucus. An attempt to give her nourishment was resisted by her with all her strength, and it was only given by prying open her clenched jaws. In this way she took some beef tea, with wine ℥ ss. She was ordered wine ʒ ss. every three hours. Morph. liq. sol. in connexion with tr. ergotæ ʒ ii. every four hours. She was to have a pill, Ext. colocynth. co. grs. v.; ol. tiglii gtt. j.; M.

12 M.—Patient has not slept any, though she has kept her bed. Is constantly talking. Her mind catches a question which is asked, and long afterwards she answers it.

Sept. 11.—Pulse 100. Patient is in same condition. Has not slept any. Nurse was unable to give her the pill. Ordered an enema. Not having passed any urine a catheter was used and three pints drawn. The flow continues, and her vagina has been filled with ice, and the dose of ergot doubled. An examination of her urine with heat and NO_5 gave no precipitate. Sp. g. 1020.

9 P.M.—Pulse 96. Bowels have been opened freely since last visit. Offers less resistance to taking her stimulants, etc., though occasionally force has to be used. Morph. s. liq. to be given every four hours until she sleeps.

12 M.—Pulse 90. Same condition. Wide awake and incessantly talking.

Sept. 13, 8 A.M.—Pulse 80. Patient grew more quiet towards morning and slept an hour. Has had since last night wine ℥ ss. every two hours. Bowels open, passes her urine freely.

7 P.M.—Patient is still delirious but more quiet. Has slept a little at intervals during the day. Pulse 72.

Sept. 14.—Patient slept several hours during the night. Pulse 60. Tongue large, slightly coated. Mind clear. Confirms the history already obtained in every particular—says "that she had sent for the father of her children and he could not be found," which preyed upon her mind for some days before she lost her consciousness.

Sept. 15.—Pulse 60.

Sept. 16.—Pulse 52; regular good force.

* * * * * * *

Oct. 1.—From the date of last report the patient continued to improve. Her pulse continued slow for some days; it kept for three days at 48. She was transferred to ward 24 female, and was convalescent. To-day when coming through the ward she was found in a hysterical convulsion. An enema was administered, bowels opened, and she soon regained her consciousness, or at least showed that she had not lost it. Her urine was examined again, it was a pale yellow color, almost colorless, sp. g. 1010. Heat and NO_5 failed to give any precipitate.

Oct. 31.—Patient has been under observation since last date. Her treatment has been tonic, with some asafœtida to allay nervous irritability. She has taken ferri lactat. in an infus. gent. co. As her health has improved her hysterical convulsions have lessened in frequency, and she has not had any for some days. She is apparently perfectly well in body and mind.

Reports of Hospitals.

NURSERY AND CHILD'S HOSPITAL.

J. LEWIS SMITH, M.D., CURATOR.

REPORT ON DIPHTHERIA.

Diphtheria, which has been so much dreaded in New York during the past two or three years, and has been the subject of so much talk both in professional and non-professional circles, has not prevailed to any considerable extent in the hospital. Isolated cases have occasionally occurred, in which symptoms and lesions showed the diphtheritic nature of that disease; and other cases in which it is doubtful whether the complaint might not have been croup, or scarlet-fever, with suppressed rash. The following cases of diphtheria present some features of interest:—

Case 1.—J. W., male, aged 6 months, was admitted into the Hospital, Oct. 20, 1859. His dejections were frequent and offensive, but were finally checked by opiate and alkaline remedies. On the 23d of Nov., the attention of the physician was again directed to him, when his fauces were found covered in every part with false membrane; his bowels were again loose, deglutition difficult, and respiration somewhat labored. He was given potas. chlorat. gr. iv. every four hours, wine whey, and beef-tea. He continued to fail, and died of exhaustion on the 29th day of November. There was no cough during his sickness.

Sectio cadaveris, 24 hours after death: Body much emaciated; a diphtheritic deposit covered the fauces, and extended into the larynx nearly to the rima glottidis; trachea, bronchial tubes, lungs, and œsophagus healthy; a portion of both lungs had an ashen hue, which, under the microscope, appeared to be due to altered blood discs; foramen ovale closed; left ventricle firmly contracted; liver of healthy appearance, weighing ℥ viss.; stomach and small intestines healthy, with the exception of slight vascular patches in the latter; mucous membrane of the colon thickened, vascular, and ulcerated; mesenteric glands moderately enlarged, and of a lighter color than natural; the kidneys, examined under the microscope, appeared to be healthy.

This case shows how insidiously diphtheria may approach. There was no cough to announce the disease, as in croup. The lassitude, fever, and difficulty in swallowing, directed attention to the throat, when diphtheria was discovered fully developed. The dysphagia accompanying diphtheria, is no doubt generally due to inflammation of the throat, and was so probably in this case, but it sometimes appears to result from paralysis of the muscles of deglutition. A nursing infant, not far from the hospital, did not recover the full

power of swallowing for several months after the attack, and long after the inflammation had subsided.

The colitis, in this case, appeared to be independent of the diphtheria, as there was no pseudo-membrane in the colon; and the ulceration rendered it probable that the inflammation was of considerable duration, perhaps dating back to the looseness in October.

Case 2.—D. A. H., æt. 17 months, was admitted into the Hospital, Oct. 6, 1859, emaciated, and with diarrhœa, probably the result of the 'summer complaint.' The diarrhœa continued at intervals, through life, and he had considerable cough. On the 8th of December, the respiration becoming embarrassed, he was carefully examined, and diphtheritic patches were found in the mouth, and upon the fauces. The throat was washed with a solution of nitrate of silver, thirty grains to the ounce; four grains of chlorate of potash were given, every four hours, with the liberal use of beef tea and wine. He continued to fail, and died of exhaustion on the 10th.

Sectio cadaveris, on the 11th: Body much emaciated; rigor mortis slight; the diphtheritic deposit covers the fauces, epiglottis, glottis, to the rima glottidis, the entire œsophagus, and almost the entire stomach; the mucous surface underneath was infected; that of the œsophagus and stomach, especially, was very vascular, softened and thickened; there were pleuritic adhesions, apparently, of considerable standing at the apex of the left lung; on the right side the middle lobe was solid, non-crepitant, and not susceptible of inflation; lower portion of the upper lobe, on the left side, was in a similar condition; other portions of the lungs healthy; foramen ovale still open; liver of healthy appearance, weight ℥ xiijss.; kidneys healthy; Peyer's patches injected; and in other places, the mucous surface of the intestines was moderately vascular and thickened.

The deposit taken from the epiglottis, examined under the microscope, presented an amorphous appearance; no cells were noticed in it; that in the stomach was found to consist, almost entirely of cells, no doubt the plastic corpuscles of some writers, the pyoid of others; no fibrillation was observed.

It is well known that death in diphtheria usually occurs from exhaustion, but in many cases untoward circumstances conspire with the depressing nature of the disease to produce the fatal result. In two instances, I have known hæmorrhage from the nostrils and mouth, to be followed quickly by death. In the above case, the unfavorable circumstance was the seat of the deposit: the function of the stomach was almost entirely lost by the thick membrane which covered its follicles.

The deposit in diphtheria is said to be identical with that in croup. It appears to me to be more friable—more cellular and less fibrillated—than in most cases of croup. In several instances I have found the deposit to consist almost entirely of plastic cells, as in the above case.

Diphtheritic Paralysis.—M. Roger has investigated the history of the numerous cases of diphtherite which have occurred during 1861, in the Children's Hospital, at Paris, for the purpose of ascertaining the relation of paralysis to this affection. Of 210 cases thus observed, paralytic accidents have appeared in 31, or in about one-seventh of the whole number. But, as many of the patients are removed from the hospital before the period of paralysis arrives, and as many also die early of the diphtheritis, the proportion is probably much greater; in fact, about one-fourth. M. Roger also found that secondary paralysis is rare after other acute maladies. Diphtheritic paralysis appeared most frequently between the ages of four and six; 21 times in the female, and 17 in the male sex. The season of the year did not appear to have any influence over it. The paralysis almost always began at the pharynx and soft palate; in 2 out of 10 cases, the paralysis reached the lower limbs.—*Brit. Med. Jour.*

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, January 3, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. FORDYCE BARKER'S PAPER ON THE USE OF ANÆSTHETICS IN MIDWIFERY.

(*Continued from page* 88.)

Dr. Barker, in closing the discussion, very briefly alluded to the points referred to by previous speakers:—I have long thought that there is a field for future investigation in regard to the differenee in the effects of the two anæsthetic agents, the sulphuric ether and chloroform, and that we may be able in the future to ascertain the laws which should guide us in one class of cases to select the one, and in another class, the other agent. That there is a decided difference between them in their effects in producing anæsthesia, must, I think, be apparent to all who have had much experience in their use. I will mention, in illustration of these points, four distinct facts that I have observed.

1st. At a very early period after the discovery of anæsthesia, I was called to see a stout, muscular, laboring man, who had a dislocation of the shoulder. It was ten or twelve days after the accident had occurred, and the case had been, by his former attendant, mistaken for and treated as rheumatism. The tegumentary coverings of the shoulder were excoriated and very sensitive from the application which had been made to relieve the supposed rheumatism, on account of which it can readily be believed that the requisite manipulation for reducing the dislocation would have been almost out of the question. It struck me that this would be an excellent opportunity for testing the alleged new discovery. I therefore sent for Dr. Allen, an excellent dentist, now of this city, but then residing in the same town with myself, who had purchased the right to use the letheon, as it was then called. I had already seen him use it once with success in the extraction of teeth. I was, therefore, not so much surprised by the complete anæsthesia induced, as by the wonderful case with which I reduced this dislocation, which had existed so many days in a very muscular man. The muscular relaxation was complete. Some two years after, when chloroform had come in use, I was called to another case of dislocation of the shoulder, but in this case, although the chloroform produced most perfect anæsthesia, I was greatly disappointed by the absence of the muscular relaxation which had so much facilitated the reduction in the former case.

2d. It has happened to me several times to meet with difficulty when administering chloroform for dental operations, in getting the mouth open for the operator, after anæsthesia has been induced. About four years since, I was requested to administer the chloroform to a very nervous lady who was to have the stumps of eleven teeth extracted. She had come to the city to have a complete set of teeth inserted. She was a bad subject for coming under the influence of chloroform, and when complete anæsthesia was produced, we found it impossible to get her mouth open. As it was not possible, from the extreme nervousness, to operate when she was only partially under the influence of the anæsthetic, we were obliged to give up for that day the proposed operations. Some days after, I administered the sulphuric ether to this lady successfully in every respect.

From the facts I have just mentioned, I have been disposed to come to a different conclusion from my friend Dr. Peaslee, and to ask myself whether in the rigidity of the perineum and of the cervix uteri, the ether would not be the preferable anæsthetic. But I have not yet tested the question practically.

3d. I am convinced from practical experience that ether does not control convulsions in the same happy way as does chloroform. In the early days of anæsthesia, I made

use of ether in three cases of puerperal convulsions, and I decided from its effect in these cases never to use it for this purpose again. Now, I hardly need to say that I look upon chloroform as one of our most valuable adjuncts in the management of certain forms of puerperal convulsions.

4th. I will mention another fact which I think goes to show that there is some marked difference between the anæsthetic properties of the two agents. In the summer of 1860, I had as a patient, a lady at Newport, who suffered from the most violent attacks of that form of neuralgia of a branch of the fifth pair of nerves, usually denominated *tic douloureux*, that I have ever seen. After having exhausted all my resources in neuralgic remedies for the relief of the paroxysms (they occurred at the menstrual period, but menstruation was suspended), I used chloroform, inducing perfect anæsthesia, but without the least benefit. While fully under its influence for more than two hours, her face still expressed the most intense agony, and after the effect of the chloroform had passed off, she was in no degree relieved. In a subsequent attack after my return to the city, she was visited by Dr. King, of Newport, who administered the ether, which perfectly arrested the paroxysm. She was in this city when the next paroxysm returned. I was naturally somewhat sceptical in receiving her account as to the different effects of the two agents, and I again tried most thoroughly the chloroform, keeping her fully under its influence quite two hours, but without success in giving any relief. I then determined to test the matter by the trial of ether, after the effects of the chloroform had entirely passed off. I therefore sent for Squibb's pure sulphuric ether, and although its first inhalation was very disagreeable and unpleasant in its effects upon her, yet when complete anæsthesia was induced, the pain was so perfectly relieved that she slept the remainder of the night, some seven or eight hours, and there was no recurrence of the paroxysm.

These four distinct classes of cases involve four distinct principles, and they, with others less striking which I might mention, if time would permit, lead me to believe that we shall yet discover, in the progress of science, laws which should govern us in selecting in one class of cases the one, and in another class of cases the other anæsthetic agent. I do not mean to be an enthusiast or partisan for chloroform, but so far as I am at present informed, I still believe that it is generally the preferable anæsthetic agent in obstetric practice.

Dr. Barker then replied to the inquiry of Dr. White, whether the administration of chloroform was admissible in cases of midwifery, where organic disease of the heart, lungs, or kidney existed. In his opinion, the existence of these diseases was often an additional reason for resorting to anæsthesia in midwifery, as the vital forces during labor were saved rather than exhausted by the anæsthetic. Dr. B. also referred to a very important point, made on a previous evening by Dr. Griscom, viz. as to the precise degree of anæsthesia requisite in obstetrics. In his practice, he had endeavored from observation to establish some general laws which should guide him in this particular, but he (Dr. B.) had become convinced that each individual patient must furnish individual laws as to this indication. A man of tact and experience would, after his patient had inhaled chloroform for five minutes, detect the individual peculiarities which should govern him in this particular. Dr. B. was greatly surprised by the statement of his friend and colleague, Dr. Taylor, that his impression was that the mortality of mothers had increased since the use of anæsthetics in midwifery. Vague, indefinite impressions could have but little value in scientific argument, where positive statistics were in question. Why, the report of the registrar-general of England shows that in the year 1847, the birth of every ten thousand living children was the death of sixty mothers; whereas in 1857 it was only fatal to forty-two, and the decrease in mortality was regularly progressive. On the spur of the moment, without having at hand the exact statistics, he asserted that he had carefully studied the question as to this point, and that the statistics of the Dublin Lying-in Hospital, that of Wursburg, and of the other Hospitals which had furnished anything like reliable statistics, exhibited also a progressive decrease in maternal mortality. He did not ascribe this decrease solely to the use of anæsthetics in midwifery, but he believed that it had contributed essentially to this end.

As regards the danger from the use of chloroform in midwifery, he would again reiterate his statement that there was not a single well-authenticated case reported where death had occurred when the agent had been administered by a medical man. In the first case quoted by Dr. Watson, according to the report, the patient herself took the chloroform contrary to the advice of her physicians. 2d. She did not die until twelve hours after she had ceased to inhale the chloroform. 3d. The symptoms preceding her death, as reported, are not at all like those where chloroform has been alleged as the cause of death. 4th. They are just the symptoms of fatal collapse from rupture of the uterus, and the antecedent history confirms this theory. I can find plenty of analogous cases where no chloroform had been used. There was no post-mortem examination, and therefore we cannot say positively that the death came from this cause. As to the other cases quoted by Dr. Watson where the patient did not die, it may be admitted that dangerous symptoms arose from an excess of the agent. It is unnecessary to discuss this, as, like many other efficient agents in medicine, it may be given to such excess as to cause death. This is a point no one disputes.

The Academy then adjourned.

MEDICAL SOCIETY OF THE STATE OF NEW YORK

FIFTY-FIFTH ANNUAL SESSION.

(*Continued from page* 87.)

WEDNESDAY MORNING, FEB. 5, 1862.

After the reading and approval of the minutes of the previous meeting, Dr. O. White, of New York, called up from the table the resolution offered by the Oneida Co. Medical Society, relative to the appointment of homœopathic surgeons to the army.

Dr. Garrish then presented the resolutions adopted by the New York Academy of Medicine upon the same subject, which have been already published in the Times. Some discussion took place in reference to the adoption of the resolutions as the sense of the Society, and finally on motion of Dr. Coates, it was resolved that a committee of three be appointed to take into consideration the subject, and report at the next meeting.

The committee was constituted of Drs. Coates, Townsend, and Squibb.

Dr. E. R. Squibb, of Brooklyn, in the absence of Dr. F. H. Hamilton, chairman, read an elaborate report from the special committee upon the U. S. Drug Law, with a brief history of the movement subsequent to the adjournment of said committee. He also read a report of his own duties as the representative of the Society in the committee of revision and publication of the U. S. Pharmacopœia.

Dr. S. D. Willard presented a paper entitled, Conservative Surgery, with a list of surgeons and assistant-surgeons of the volunteer army of New York, their age, where graduated, what year, what service seen, when appointed, and where promoted.

MEDICAL PROVISION FOR RAILROADS.

Dr. Edmund Arnold, of Yonkers, next read an interesting, elaborate, and practical paper "on the medical provision for railroads, as a humanitarian measure, as well as a source of economy to companies." After citing cases of various classes, and showing the loss of life arising from the neglect of such previous provision, he detailed his plans for supplying it, much of which we have already given to our readers. As on many lines, however, stations, and flag stations are far apart and appliances would be too far

off, he also detailed provisions to be carried in the ears themselves. Within the last few days Dr. Arnold had heard that a measure had actually been prepared to go before the Legislature with the consent of most of the railroad companies of the State, of which the medical provision forms an essential feature, and of which we may give an abstract in a future number.

Dr. Mason, of Kings co., presented the following:—

Whereas, on the principle of self-preservation being the first law of nature, it is the paramount duty of the State to promote by all possible means the preservation of the health and lives of the people, and their protection against the causes of disease which continually surround them, especially in connexion with the conditions of civilization, and whereas, in the opinion of this Society, the health laws of this State have not kept pace with the rapid modern progress of sanitary science, and government fails to enforce many well known means by which disease and death may be averted, and longevity and population increased, therefore

Resolved, That the bill now before the Legislature, known as the Metropolitan Health Bill, meets with the cordial approval of the State Medical Society, as a measure which, though partial in its application to one section of the State, is a step in the right direction, and should be enacted into a law without delay.

Resolved, That the foregoing preamble and resolution be authenticated by the officers of this Society and transmitted to the two Houses of Legislature.

The resolutions were warmly supported by Drs. Griscom, Mason, Taylor, and others, and were finally adopted.

Dr. Hutemson, of Kings co., read a paper on "Dislocation into the Ischiatic Notch, with Autopsy," which illustrated the practicability of Reid's method of reduction.

Dr. Downs, of New York, followed with the synopsis of a case of peritonitis, occurring in a child, in which large doses of morphine were used in the treatment.

Dr. Brinsmade, of Troy, offered the following resolution, which was adopted:—

Resolved, That a Committee of five be appointed to draft a Sanitary Code for the State of New York, and submit the same to this Society for its consideration, at its next annual meeting.

Drs. Brinsmade, Seymour, Griscom, Hun and Mason, were appointed on the said Committee.

CIRRHOSIS OF LIVER.—VOMITING OF BLOOD.

Dr. M. M. Marsh (Onondaga) presented a specimen of cirrhosis of the liver. The patient vomited during eighteen hours more than nine pints of blood, and after the lapse of four days again vomited eighteen and a half ounces of the same fluid. Autopsy revealed a softened condition of the vessels of the duodenum, "hob-nailed" liver, and enlarged spleen. The spleen was double, each separate organ being supplied by a branch of the splenic artery, and being made perfectly distinct from each other by a membrane between; one was directly over the other.

Dr. Finnell stated that in over one thousand post-mortem examinations made by him, he had not met with a condition of the spleen similar to that described by Dr. Marsh, where the organs were placed in such relation to each other with a membrane intervening. He had, however, not uncommonly seen a series of spleens in the same subject, each supplied by a distinct arterial twig. In reference to the cause of death, he could call to mind two cases presented by him to the N. Y. Pathological Society, where death from hæmatemesis was simply the result of cirrhosis of the liver. Both these patients were young females. He also stated that the amount of blood lost in the case was an interesting fact to note.

Dr. Hart (Brooklyn) having frequently had occasion to notice the concurrence of enlarged spleen with cirrhosis, asked if such was always the case.

Dr. Finnell replied in the negative.

Dr. Garrish stated that he had frequently met with a normal spleen in cirrhosis.

The Society then adjourned to meet at 3 P.M.

WEDNESDAY AFTERNOON.

The minutes of the morning were read and approved.

Dr. Van Hœvenburgh of Ulster, read the following:—

Resolved, That a Committee of five be appointed by the Chair to see Dr. Freer, chairman of the Senate Committee on Medical Societies, as also the Medical Committee of the House, and inquire the provisions of the bill incorporating the State Homœopathic Medical Society, and report to this Society what action is necessary in the premises.

Adopted, and Drs. Vanderpoel, Bissell, Blatchford, Bates, and Taylor, were appointed such Committee.

Dr. Shrady (N. Y.) offered a preamble and resolution relative to the medical provision for railroads, as advocated in the paper read by Dr. Arnold during the morning session:—

Whereas, In the opinion of this Society, much loss of life and limb occur for want of sufficiently speedy medical assistance in cases of railroad accidents, and whereas the efforts of medical men when present are often rendered nugatory by the want of suitable appliances, and whereas it is desirable that some better provision should be made than at present exists to prevent railroad casualties, and whereas this Society has been informed that a large and comprehensive measure is about to be introduced in the Legislature of this State, of which proper medical attendance for railroads forms an essential feature, therefore be it

Resolved, That a Committee be appointed to report at the earliest moment whether any or what action shall be taken by this Society in the premises.

The Committee consisted of Drs. G. F. Shrady, E. Arnold, and A. Willard.

Dr. E. Harris (N. Y.), as Chairman of a Committee on the Medical Topography of the State, sent a communication reporting progress.

Dr. Blatchford announced that the New Jersey State Medical Society desired the appointment of a delegate to the N. Y. State Society, and moved that six delegates be named to attend the next annual meeting of that Society, which would be held in Jersey City.

CASE OF SUPPOSED MURDER.

Dr. John Swinburne, of Albany, read an elaborate paper treating of the medico-legal points in the celebrated Budge case. He gave at great length his reasons for supposing it to be a case of murder instead of suicide, and in conclusion read corroborative letters from Geoghehan, Taylor, Mott, Gross, and others.

Dr. Squibb, from the committee to which was referred the resolutions of the Oneida Co. Medical Society, and the N. Y. Academy of Medicine, upon the subject of remonstrating against the introduction of Homœopathy into the Army, reported that the Society should earnestly endorse the object of these resolutions, but advised that all unnecessary action that might be construed into persecution be avoided; that the committee felt satisfied that the Government will take no step so disastrous, so revolutionary, and so expensive, as the one of introducing any forms of charlatanry into the Army.

Dr. J. M. Minor, Kings co., read a description of a new instrument for the treatment of stricture of the urethra, and Dr. J. H. Burge, Kings co., followed with an account of important modifications made in the instrument, for a similar purpose, presented by him at the last annual meeting.

The Society then adjourned to meet in the Assembly chamber, at 7½ P.M., to listen to the President's address.

WEDNESDAY.—EVENING SESSION.

The meeting being called to order by the Secretary, the President, Dr. E. H. Parker, delivered his annual address. He chose for his subject the dignity of the Profession, and discoursed upon the various ennobling and distinctive qualifications of the physician. The whole was treated of in an exceedingly happy manner, and called forth from the assembled audience the most profound attention. We regret our inability at present to give an abstract of his remarks, but hope to do so on a future occasion.

Dr. Kendall presented a resolution of thanks for the address, accompanied with a request for its publication. The Society then adjourned to meet at 9 A. M., on Thursday. The further entertainment of the evening was left to Surgeon-General Vanderpoel and Dr. Swinburne, who received the members in turn at their respective residences.

THURSDAY.—MORNING SESSION.

The Society was called to order by the President, E. H. Parker, and the minutes were read and approved.

Dr. Jas. V. Kendall, as chairman of the committee on the introductory address of the President, made a report in a series of resolutions, complimentary to the Surgeons at Bull Run, and those who would not accept parole.

He also presented the following.

Whereas an inscrutable but all-wise Providence has seen fit since the adjournment of our last annual meeting to remove from our midst by death, one of our members, the late President of the Society, therefore,

Resolved, That in the decease of Dr. Daniel T. Jones, the members of the Society are solemnly taught the scriptural lesson, that "man's breath is in his nostrils," that life, health, and all their concomitant blessings, are dependent upon the will of our Supreme Ruler; and that it becomes us to bow submissively to his will, and have our work done, and well done, like our deceased member, for our call when the Master shall come.

Resolved, That in the decease of our brother, this Society has lost one of its most earnest, efficient, and valuable members; his patrons one of the safest and most judicious of medical advisers; his family the best of husbands and fathers, and the community in which he lived, a generous, noble, upright, honest man; and that his virtues as member of different communities, but of the same medical society, it becomes us to imitate.

Resolved, That this Society extend an expression of their condolence to the widow and children of the deceased, and that a copy of these resolutions be sent them by the secretary of this Society.

OFFICERS FOR THE ENSUING YEAR.

The committee on nominations then made the following report, which was adopted: for *President*, Thomas Hun, of Albany; *Vice-President*, D. P. Bissell, of Utica; *Secretary*, S. D. Willard, of Albany; *Treasurer*, J. V. P. Quackenbush, of Albany; *Committee on Publications*, Thomas Hun, S. D. Willard, and Howard Townsend; for *Censors*, *Southern District*, W. Govan, Joel Foster, and E. Harris; *Eastern District*, B. P. Staats, J. W. Blatchford, and P. McNaughton; *Middle District*, J. S. Sprague, C. B. Coventry, and A. P. Doolittle; *Western District*, Alex. Thompson, H. W. Dean, and E. Hall.

Dr. Shrady, as chairman of the committee to report on the medical provision for railroads, offered the following for adoption:—

Whereas, This Society has heard that a measure is about being introduced into the Senate, of which an essential feature is thorough medical provision for railroads, and whereas we believe that much loss of life and limb results from want of such provision, therefore,

Resolved, That we hail with satisfaction the introduction of any plans calculated to secure so desirable an end.

Resolved, That a copy of the foregoing be forwarded to Senator Smith, of Kings county, the gentleman who had given notice to the Senate of the introduction of such a measure.

The following papers were next read. By Dr. Burge, Kings co., "A new instrument for removing foreign bodies from trachea and œsophagus;" Dr. Bly, Rochester, "On proper points for amputation."

Dr. Quackenbush, Albany, in behalf of Dr. Van Dyck, exhibited a specimen of monstrosity, and remarked upon a peculiarity which existed in its formation, viz. that the thoracic and abdominal viscera were external to the body. The cord was little over two inches in length. The monster was the product of an abortion in a young unmarried female.

Dr. Lee, Peekskill, gave a description of a new field tourniquet, devised by Dr. Lambert.

Dr. Swinburne exhibited a patient upon whom he had some time since performed the operation of exsection of the hip-joint.

The following resolutions were in turn offered and adopted.

Dr. White, N. Y.:—

Resolved, That the thanks of the State Medical Society be accorded to its secretary, Dr. S. D. Willard, for the laborious compilation he has made of the names of the medical men who have entered the Army from the State of New York, and that he be requested to continue the same.

Dr. Lee, Peekskill:—

Resolved, That a committee of three be appointed to compare the code of ethics adopted by this Society in 1838, with that of the American Medical Association, and present the revised copy to the secretary at the next annual meeting.

Dr. Lee, Minor, and Townsend, were appointed.

Dr. Coates:—

Whereas, It becomes us as dependent upon the All-wise Being for guidance in all our transactions, therefore

Resolved, That hereafter the proceedings of our annual meeting be inaugurated with prayer, and that the secretary be requested to invite the attendance of some clergyman to act as chaplain.

After the passage of a vote of thanks to Drs. S. Oakley, Vanderpoel, and J. Swinburne, the Society adjourned *sine die*.

American Medical Times.

SATURDAY, FEBRUARY 15, 1862.

RELATION OF THE SANITARY CONDITION OF NEW YORK TO THE COUNTRY.

The country papers contain notices of the extensive prevalence of small-pox in different parts of this and adjoining States, as proved by the frequency of finger boards posted along the highways, blazoned with the horrifying capitals "Small-pox here," and a significant hand pointing to some unfortunate habitation. It is impossible to describe the panic with which the inhabitants of country towns are stricken when this loathsome disease attacks its first victim among them. We have seen families quarantined, streets closed, and even whole villages shut out from communication with the surrounding country, by notices posted on the roads announcing that there was a case of small-pox in the town. But a year or two since, an unfortunate citizen of a populous and very intelligent community in the interior of this State, contracted small-pox in his visit to the city. On the first rumor of the nature of his disease, the burghers held a meeting, and appointed a Board of Health, consisting of the four physicians of the place, whom they deputed to remove the sick man to a distant wood, and watch over him through his illness. The Board attempted to carry out their instructions, but no citizen would allow his horse and wagon to be used for such a purpose, lest he should contract this disease; for the same reason many objected to giving bed-clothes, though they were not to be returned; but one citizen, more public-spirited and fearless than his neighbors, volunteered to furnish straw, provided the members of the Board of Health would not come to his barn, but would take it where he should leave it at a distance, on the highway.

It may be safely stated, that every case of small-pox in a country town costs, in derangement of business simply, more money than is annually expended upon its *public school*. If we add to this pecuniary loss, the feverish excitement of popular apprehension, and the sufferings and probable death of the victim from want of proper nursing, we may but indifferently estimate the cost to the country of the general prevalence of small-pox.

But whence arises the small-pox of country towns? We should not be wide of the truth in nine cases in ten, if at the other extremity of the finger-board which indicates the locality of the disease, we should place another hand, pointing New York-ward, as the source from which emanated the dreaded pestilence. During the past summer the deaths from small-pox in this city rose to thirty per week. New York thus supplies the country, to an extent no one can determine, with the seeds of contagious, infectious, and epidemic diseases. Says a recent Providence (R. I.) paper: "*Nine-tenths of the small-pox in this city comes from New York.* There are now cases of *varioloid* on Friendship street, Transit street, and on Smith's Hill, all within a few days, and *all coming from New York.*" What is true of Providence is true of nearly every city and town in the country, where this disease prevails. In four adjacent counties in central New York, we have recently learned of the trans-

plantation of this disease direct from New York. But perhaps the most striking and melancholy illustration of the power of a great commercial centre to disseminate far and wide contagious diseases, is seen in the breaking out of small-pox in nearly every regiment of soldiers which passed through this city to the seat of war. Who can estimate the suffering and death that have resulted from this cause?

What conclusion is to be drawn from these facts? Manifestly this, that New York ought, for the safety of the country, as well as for its own welfare, to be placed under the most rigid sanitary government. It should have an intelligent Board of Health, whose jurisdiction should extend over New York, Kings, and Richmond counties, all of which lie contiguous, and embrace quarantine, and every possible source of disease; its executive officers in each ward and town should be medical men, whose duty should be to seek out and know every plague-spot in this area; it should have power to improve the homes of the poor; to remove nuisances; to keep the streets free from putrifying material; in a word, with power to place this entire district under thorough and constant sanitary inspection. Can any sane person doubt, that under such a health organization, the public health of this entire district would be greatly improved, and thereby the country be protected to a considerable extent, from communicable diseases? We believe not.

Impressed with these views the citizens of New York, Kings, and Richmond counties, are making strenuous efforts to obtain the passage of a Health Bill through the present Legislature, which shall enable them to improve the sanitary condition of this area, by removing the preventable diseases, and effectually controlling the epidemics and endemics which may arise therein. Under the present rule of ignorant and corrupt politicians, this city expends directly and indirectly nearly half a million of dollars for health purposes, not *one dollar* of which is intelligently applied to improve its sanitary state. Small-pox, scarlet fever, cholera infantum, and allied diseases, rage among the poor like consuming epidemics without one effort being properly put forth by our *one hundred and eighty-three* health officials. How can it be otherwise, when the officials, who are required to seek out infectious diseases in tenement houses, are taken from the following occupations! The present City-Inspector has deliberately selected as his health wardens men engaged as follows:—1 was a clerk, 1 a speculator, 1 an emigrant runner, 1 a barkeeper, 1 a policy dealer, 1 a plumber, 1 a stone-mason, 2 were bricklayers, 1 a ship carpenter, 2 were house carpenters, 1 a barber, 3 were rumsellers, 1 a cartman, 1 a butcher, and 1, until his appointment as Health Warden, had no business occupation. To supplant this corrupt, expensive, and inefficient organization with a system of sanitary surveillance like that already sketched is the aim and effort of the leading citizens and physicians of the district above named. The bill known as the "Metropolitan Health Bill" has been matured by the wisest and best citizens, and is adopted as that which can alone remedy the evils under which we suffer.

Should the country, which we have shown reaps no small harvest annually from the noxious seeds disseminated from New York and Quarantine, remain an indifferent spectator to the fate of the "Metropolitan Health Bill" now before the Legislature? We aver not. It is the duty of every physician throughout the State at once to circulate memorials in its behalf, and send them largely signed to their representative in the Senate or Assembly. We hope no one will neglect this duty for a single hour; the trouble will be slight, and the influence of such petition will be powerful, perhaps effectual. In addition to this, we trust medical men will correspond with their respective representatives in either House, and urge them to support this great public measure. But should this effort be limited even to our own State? Have not Boston, Providence, New Haven, and other cities, a personal interest in this reform in our Health Department? Their annual statistics of mortality show what should be their interest, if they consult only their own immunity from preventable diseases. Will they not represent to the Legislature of the State of New York the actual interest they have in the health of New York? They will thereby serve as well the cause of humanity as the interests of their own communities.

THE WEEK.

The Medical Society of the State of New York is becoming more and more important to the profession of the State. The last session was one of unusual interest, in the character of the discussions which came before it. Meeting during the session of the Legislature, and being recognised as a body deriving its special protection from that body, it has a most salutary influence upon legislation. We are glad to see that the Society gave its sanction to the Metropolitan Health Bill, and other matters of a medical character before the Legislature. We can only regret that it reposed such confidence in our General Government, as to believe it impossible for it to legalize Homœopathy in the army. Those who are most familiar with the medical bias of prominent members of Government, entertain fears that irreparable mischief may yet be done to the Medical Staff. Even if there were no danger of such innovation, ought not the medical profession to manifest its interest in that staff, by protesting against any change? The moral effect would have been most salutary. The Medical Society of this State should have entered its solemn protest against the recognition of any system of medicine by Government, and have made its emphatic voice heard at Washington. Let not other societies follow this timorous policy.

The *Australian Medical Journal*, published at Melbourne, contains some facts of interest relating to the medical profession in that far-off country. This Journal is conducted by the Medical Society of Victoria, and compares favorably with our best quarterlies, both in contents and typography. The original department contains papers on practical subjects, drawn up with great ability. From an article on epidemics, we learn that diarrhœa and dysentery have scarcely proved fatal in a single case during the year in a district containing 125,000 inhabitants, but diphtheria and scarlet fever have been very prevalent. Nearly all the coroners are medical men. The University of Melbourne is about to establish a Medical School. An Act to provide for the registration of legally qualified Medical Practitioners has just been defeated in the Colonial Legislature. A case of trial for alleged malpractice in midwifery is reported. The statistics of the Melbourne Lying-in Asylum for four years are given with the following results:—Total labors, 772. Chloroform in 35 cases. Forceps in 30; 29 recovered, 1 died; children, born alive, 25,

dead, 5. Turning in 3 cases; 2 recovered, 1 died; children, born alive, 0, dead, 3. Footlings, 15; mothers recovered, 15; children, born alive, 10, dead, 5. Breech cases, 9; mothers all recovered; living children, 4, dead, 5. Total births, 785; still births, 57.

—

In an interesting address, delivered at the opening of the New Clinical Lecture Room of the Philadelphia Hospital, Dr. J. L. Ludlow, one of the Medical Board, gave a sketch of Clinical Medicine. The first Clinical Lecture in this country, according to Dr. Ludlow, was given by Dr. Thomas Bond, in the Pennsylvania Hospital, Dec. 3, 1760, now about a century since. The following extract from the lecture is worthy of record:—

"Speaking of Dr. Morgan, the Professor of the Theory and Practice in the University, he remarks:—'The field this gentleman undertakes is very extensive, and has many difficulties, which may mislead the footsteps of an uncautioned traveller. Therefore, lectures in which the different parts of the theory and practice of physic are judiciously classed and systematically explained, will prevent many perplexities the student would otherwise be embarrassed with, will unfold the doors of knowledge, and will be of great use in directing and abridging his future studies. Yet there is *something further wanting:* he must *join examples with study*, before he can be sufficiently qualified to prescribe for the sick, for *language* and *books alone can never* give him adequate ideas of diseases, and the best method of treating them; for which *reasons Infirmaries are justly reputed* the *grand theatres of medical knowledge.* There the *Clinical Professor comes to the aid* of speculation, and demonstrates the *truth of theory by facts*, etc., etc.' Further on again he says: 'I am now to inform you, gentlemen, that the managers and physicians of the Pennsylvania Hospital, on seeing the great number of you attending the School of Physic in this city, are of opinion that this excellent institution affords a favorable opportunity of further improvement to you in the practical part of your profession; and being desirous it should answer all the good purposes intended by the generous contributors to it, have allotted to me the task of giving a course of clinical and meteorological lectures in it, which I cheerfully undertake.'"

Correspondence.

REPORT OF THE ANNUAL MEETING OF THE NEW JERSEY STATE MEDICAL SOCIETY.

[To the Editor of the American Medical Times.]

Sir:—The Annual Meeting of the Medical Society of the State of New Jersey was held at New Brunswick on Tuesday and Wednesday, the 28th and 29th of January last. For many years it has been the custom to meet at Trenton, the capital of the state, but it was thought that a change to several of the larger cities in turn would increase the general interest in the Society. It is very appropriate that the city of New Brunswick should receive our first visit. The following pleasant historical fact appears far back on our records:—"A Society was founded and organized under the name of the Medical Society of New Jersey, at New Brunswick, on July 23d, 1766, by the voluntary association of fourteen physicians and surgeons. The Society held its meetings regularly until 1775, when, on account of the distracted state of the country caused by the revolutionary contest, its meetings were suspended until 1782. In 1790 a Vice-President was added to the officers, and in 1807 a Corresponding Secretary. In 1816 the Society was incorporated under the name and style of the Medical Society of New Jersey." From year to year these meetings have been maintained, and have afforded occasions of professional profit and pleasant reunion to the physicians of our state. There are some who neglect its privileges, and do not realize the importance of such an organization in promoting the general welfare and progress of our calling, but of late there seems to have been a revival of interest in its proceedings and deliberations. The present was its ninety-sixth anniversary, so that we are approaching quite nearly the first centennial of any State Medical Society in America.

The annual meeting was opened with prayer by the Rev. Dr. Stubbs, of New Brunswick. The names of the Fellows and Delegates present having been duly enrolled, several matters of executive business were transacted. The Rev. Dr. Stubbs, of New Brunswick, and Prof. Cook, of Rutgers College, were invited to sit with us during our sessions.

The annual opening address was delivered by the President, Dr. J. Blane, of Hunterden co. After a cursory notice of the history and present status of the Society, he drew attention to the valuable efforts of the American Medical Association, and to the importance of elevating the standard of elementary as well as professional education.

"The power of associations," said he, "is a myth, unless sustained by individual exertion, and it is only by the personal ardor, learning, and experience, of individual practitioners, that the science of medicine can be truly elevated." Dr. Blane has occupied many positions of trust, and is now a State Senator, but claimed his present position as the great honor of his life. He is one of the few whose interest in his profession has not been diminished by honors in another direction.

The report of the standing committee, through its chairman, Dr. Wickes, was of unusual interest. The various facts relating to the profession and practice in the state were most ably collated, and the report, when published, will be valued as a permanent medical document. During the last year we have to mourn the loss from our ranks of Dr. Akers, of Newark, from diphtheria, apparently contracted while in the discharge of professional duty; of Dr. Evans, a prominent medical citizen of Monmouth co.; and of Surgeon Weller, of the Ninth New Jersey regiment. The report noticed variola, scarlatina, diphtheria, and to a partial extent gangrenous erysipelas, as epidemic in our state during the past year. A condensed history of miasms, as made manifest in the different counties for years past, was also presented, and many most interesting facts elicited. Among new remedies, Squibb's preparation of opium was warmly commended to the profession in place of McMunn's elixir or any secret nostrum of the kind.

Dr. E. M. Hunt, as chairman of the committee on the relations of chemistry to nervous disease, made a report which was ordered to be printed among the transactions. Two or three other reports of committees, and the regular essay, were omitted on account of the absence of some of the persons appointed in duty upon the army medical staff, and from other unavoidable causes.

Delegates were appointed to the American Medical Association, and to the Quarantine and Sanitary Convention, as also corresponding delegates to the State Societies of New York, Pennsylvania, Connecticut, and Massachusetts.

The following were elected officers of the Society for the ensuing year:—

President, Dr. J. Woolverton.
1*st Vice President*, Dr. Varick.
2*d* " " Dr. E. M. Hunt.
3*d* " " Dr. A. Coles.
Corresponding Secretary, Dr. T. J. Corson.
Recording Secretary, Dr. Wm. Pierson.
Treasurer, Dr. J. T. English.
Standing Committee, Dr. Stephen Wickes, Chairman.

The meeting was more numerously attended, both by fellows and delegates, than it had been for many years previous, and it was a most delightful reunion of the profession in our state. The greatest harmony of feeling prevailed, and all seemed desirous of doing all in their power to maintain and exalt the honor of our noble science and effective

art. On the evening of the second day the Society adjourned, to meet on the fourth Tuesday of January, 1863, in Jersey City.

The printed transactions will be sent you in due time, and from these you will be able to select some valuable medical facts and illustrations.

Yours, etc., H.

New Brunswick, Jan. 31st, 1862.

EXCISION OF THE OS CALCIS AND CUBOID BONES.

[To the Editor of the American Medical Times.]

Sir:—We are glad, for several reasons, to read under the above caption in the American Medical Times of January 18th, an account, by Brigade Surgeon Bradford, of the successful excision of the above bones for disease. There have been few subjects in modern surgery that have excited more warmth of discussion than the relative merits of the operations of amputation and excision, and their respective advocates have shown so much party feeling in the consideration of the subject, that it is to be feared joints have been occasionally sacrificed where simpler means would have effected a cure. In its application to inappropriate cases the useful operation of excision has lost repute, and we are, therefore, gratified to see a renewed instance of its apparently judicious and successful employment. We are also pleased to see the writer infused with an enthusiastic appreciation of the merits of *conservative* surgery, and that in spite of so unpropitious a designation for a modern improvement, he really esteems it to be what it is—where intelligently employed—a most fortunate and valuable step in the progress of our art. Excision, whether having for its object the removal of the articular ends of bones, a portion of the shaft, or the whole of smaller bones, has the advantage over amputation, that it preserves the rest of the limb, or the adjacent structures, to the use of the patient; but it should not be employed where the resulting usefulness of the limb or the demands upon the constitutional powers, as is often the ease, are questions of seriously doubtful issue. There are several excisions hitherto, and at present, practised, that will never become general, and that do not confer the advantages that their advocates claim. There are many cases, disease of the ankle-joint for example, where the operation cannot supersede that of amputation, and be employed as a satisfactory substitute. The removal of the foot by either Syme's, Pirogoff's, Roux's, or Baudens's operation, gives a resulting stump far more comfortable and satisfactory to the patient, with artificial appliances, or even for unaided progression, than can be the shortened limb and anchylosed joint, which are the result of the operation by excision. In disease of the tarsal joints, however, depending upon diseased bone, the removal by excision of the affected bones, or portions of them, is recommended by high authority to be carried out whenever practicable. Fortunately, disease in this locality, especially in young persons, under appropriate constitutional treatment and rest, "manifests," says Dr. Hodges, in his recent excellent monograph upon the excision of joints, "a strong disposition to recovery without operation." As excisions of joints have been comparatively little performed in this country, the surgical literature of the United States is meagre upon the subject of tarsal excisions. There is, however, in vol. ii., *Records Boston Soc. for Med. Imp.*, a report of an operation performed by Dr. H. J. Bigelow of Boston, in 1855, in which that distinguished surgeon removed the whole tarsus, excepting the os calcis and astragalus, together with the tarsal heads of the second and third metatarsal bones. This operation was soon after imitated successfully by Mr. Skey of London. In the cases appended by Stratham to his edition of Stromeyer, we notice two analogous cases performed by him in 1852 and 1855. In another case cited by Stratham in vol. xxxvii., *Med. Chir. Transactions*, the cuboid and external cuneiform bones were removed, at a first operation; at a second, the scaphoid and the remaining cuneiform; and at a third, the astragalus was scraped, and the tarsal ends of the second and third metatarsal bones were removed. Four years afterwards the patient had a foot in which "the natural appearance was little altered!" The case just reported by Dr. Bradford, in which the entire os calcis, the cuboid bone, and a portion of the astragalus were removed for carious disease, the patient three and a half years afterwards "showing a slight cateh and halt in his gait which it is not easy to observe," is one of the most remarkable cases of the kind on record, and furnishes renewed illustration of the wonderful reparative powers with which the human system is endowed. W.

Washington, D. C., January 29, 1862.

FIFTY-FIFTH ANNUAL MEETING OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

[To the Editor of the American Medical Times.]

My predictions as to the busy time which the Society would have on Wednesday were verified. Papers were read during the morning session by Drs. Marsh, Hutchison, Downs, and Arnold. Each was interesting in itself, but I think the last, which treated of railroad provision for the wounded, is deserving of little more than a passing notice. Dr. Arnold has been for a long time turning over in his mind the benefits that would result to the travelling public by the adoption of some reliable plan of action, and has finally brought the results of his investigations before the Society in the form of an elaborate and well-timed paper. His suggestions are simple, efficient, and eminently practical, and they cannot fail to carry conviction to the mind of every one interested in the preservation of life and limb on the national thoroughfares. The whole matter is now being brought up in the Legislature, where it is to be hoped that it will receive the grave consideration which it deserves.

Dr. Mason offered a resolution endorsing the Metropolitan Health Bill. Dr. Griscom explained in a very satisfactory manner the objects of such a bill, and did not fail to convince the majority concerning the necessity of its becoming a law. The bill is now before the House, in the hands of the House committee, but whether they will report favorably upon it your correspondent is not informed. The afternoon was for the most part occupied by Dr. Swinburne, who gave at great length his views concerning the famous Budge case. The large hall was filled with members, who gave their close attention to the subject from beginning to end. Diagrams were exhibited upon the wall, illustrating the various positions which the assassin was supposed to have assumed. Dr. Swinburne's theory concerning the case was that the woman was suffocated first and her throat cut afterwards. A great many strong points were stated in support of this position, but it is certainly unfortunate for the purposes of science that so few authorities were mentioned. How different in this respect from the manner in which Dr. Clark treats the same subject. Dr. S. has shown himself a hard worker, but he is altogether of too enthusiastic a nature to be impartial on any subject; every point must seemingly serve his end else he does not call it into his service. At the conclusion of the paper letters were read from several distinguished medical jurists who express unqualified opinions in support of Dr. S.'s theory. These gentlemen, however, have only received Dr. S.'s version, and under such circumstances there is almost always an involuntary and irresistible endeavor for the interested party to make certain points stronger than they should be. It is not my purpose to give any opinion *pro* or *con* in the Budge case; the arguments of Dr. Clark and Dr. Swinburne are both given to the medical public, and before the impartial jury of their peers the opinions of both will receive that consideration which they merit.

I have many more things to talk about in connexion with the meeting, but shall be compelled to defer them until your next. Yours, etc.,

Albany, Feb. 10, 1862. Rectus.

Medical News.

Translation of American Medical Works. — We noticed some time since the translation of Prof. Bedford's work on the Diseases of Women into the French language; we now learn that a translation of this work into German is in progress at Vienna. Prof. Gross's System of Surgery is also being translated into the Dutch language.

Investigations on Hydrophobia in different Parts of Europe, especially in Upper Italy. By M. Boudin.—The geographical study of rabies furnishes powerful arguments against the spontaneous origin of the disease. In 1856, there were 75,446 dogs in the Department of the Seine; and, in 1857, the number had only fallen to 64,408. In France, there are two cases of rabies out of every million of inhabitants. At the veterinary school of Alfort, 42 rabid dogs were received in 1856; only 12 in 1857; and as much as 56 in 1858. Out of 239 cases of rabies recorded in France, there were 157 men and 64 women. Out of 228 persons bitten in France, 188 were bitten by dogs, 26 by wolves, 13 by cats, and 1 by a fox.

Respecting the seasons of the year, it has been found, by returns lately published in France, that out of 181 cases of rabies in human beings, 40 were recorded in December, January, and February; 44 in March, April, and May; 66 in June, July, and August; and 31 in September, October, and November. Out of 147 cases of rabies noted in France, the period of incubation was, in 26 cases, less than 1 month; in 93 cases, from 1 to 3 months; in 19 cases, from 3 to 6 months; and, in 9 cases, from 6 to 12 months. Out of 161 cases observed in France, the duration of confirmed rabies was not more than 2 days in 34 cases; 4 days in 98 cases; 6 days in 24 cases; 7 days in 2 cases; 8 days in 1 case; and 9 days in 1 case. In England and Wales, the deaths from rabies were 25 in 1851, 15 in 1852, 11 in 1853, 16 in 1854, 14 in 1855, 5 in 1856, 3 in 1857, and 2 in 1858. In Prussia, the deaths from the same cause were 20 in 1844, 15 in 1845, and 28 in 1846. In the Austrian Empire, the deaths from rabies were 589 from 1830 to 1838; and 449 from 1839 to 1847. In Bavaria, there were 39 from 1844 to 1850. In 1851, the disease reigned epidemically in the north of Germany; at that period no less than 267 cases of rabies were observed in dogs at Hamburg and its vicinity. From 1829 to 1854, 35 patients suffering from rabies were received into the Great Hospital at Milan (19 males and 16 females). In 1832, '33, '36, '39, '47, and '50, no cases of rabies were received in that hospital; but 5 were admitted in 1849, 4 in 1838, 4 in 1854, 3 in 1851, and 2 in 1830, '35, '37, and '48. In the other years, only 1 case was admitted. Out of these 35 patients, 17 were less than 15 years old—an enormous proportion, which is probably the result of the habit of children to play with animals. In none of these 35 patients did the symptoms appear before the 15th day, and with one of them the incubation was from 170 to 175 days. With none of these patients did death occur before the 25th hour after the appearance of the first symptoms. The author himself, however, saw a case of rabies at the hospital of Versailles, in 1846, where the patient died two hours after the disease had appeared. From other figures mentioned by the author, it is proved that neither the muzzling of dogs nor the cold season of the year supplies a safeguard against the rabid bites of these animals.—*Lancet.*

Spontaneous Fracture of a Rib.—Dr. Castella, of Fribourg, describes a case of fracture of the second false rib on the left side, produced by the act of sneezing. Ulrich B., keeper of a *cabaret*, a strong and hearty man, one day took a pinch of snuff from one of his customers, and was thereupon seized with a violent fit of sneezing. To arrest the sneezing, he closed his mouth, and strongly dilated his chest; but, spite of this, a violent act of expiration followed, and crack went the rib.—*Brit. Med. Jour.*

Course in Military Science at the Rensselaer Polytechnic Institute.—The Trustees of the Institute believing that a Course in Military Science can be given at this Institution, which will be highly useful both to those young gentlemen preparing for the civil professions, as well as to those desiring to qualify themselves for military service, announce their intention to establish such a Department at the opening of the next session of the Institute, September 18, 1862, provided that a sufficient number of applicants be admitted to effect a favorable organization. The Course of Instruction, which will be systematic, practical, and very thorough, will be arranged both in a Post Graduate Course of one year, and also in a Supplementary Course to the present one in Civil Engineering. It will be necessary for admission to the former course, that the student be either a graduate of college, of the Institute, or of some other scientific school of similar standing; and to the latter course, given in connexion with Civil Engineering, that he be a student in that department, taking a full or partial course, in which case both courses may be accomplished, by a little extra effort, in the usual period of three years. The course of study and practice, which will be placed under the charge of a competent graduate of the United States Military Academy, will be as fully illustrated as possible, and embrace the following subjects:—1. Use of Small Arms; 2. Tactics of Artillery and Infantry; 3. Theory of Ordnance and Gunnery; 4. Military Engineering and Science of War.

Obstetric Section.—At the last meeting of the Obstetric Section, held Jan. 20, 1862, Dr. S. D. Hubbard was elected President, and Dr. Mortimer G. Porter Secretary.

Railway Accidents.—The information possessed as to the extent and character of accidents occurring on railways is very precise, while other means are available for comparing them with accidents from other modes of travelling. The passenger trains of the United Kingdom travelled over nearly 50,000,000 of miles in 1859. In 1860, the distance had increased to 52,816,579 miles. The number of railway accidents in four years was as follows:—

Year.	Accidents.	Killed.	Injured.
1857	62	26	657
1858	56	35	467
1859	56	13	386
1860	68	37	515

Of persons killed by railway accidents in the United Kingdom, the proportion to the whole number of travellers was, in 1854, 1 in 7,195,342. In 1860, it was 1 in 5,677,000. In France it was 1 in 7,000,000. In Belgium, 1 in 8,860,000. In Prussia, 1 in 17,500,000 of all travellers. The proportions of persons killed whilst travelling by diligences in France was 1 in 335,000—about equal to the proportions of both *killed and injured* on English and French railways. On the railways of the United States these amount, however, to 1 in 188,000; but there the cost incurred in constructing the lines is two-thirds less than on European railways.—*Lancet.*

Medical Fees in Paris.—In the matter of obstetrics, the fee for each accouchement varies from 25 francs (which is, perhaps, the lowest paid to the *man* midwife) up to 600 francs or £24, which is, with few exceptions, the highest claimed in any ordinary case. Surgical operations constitute the branch of practice in which the greatest latitude is allowed. I happen to know of two cases, one that of a common boil on the lower lip, and the other that of a fistula in ano, in which the ordinary operations were performed, and for which, in the first instance, 1000 francs (£40), and in the second, 5000 francs (£200), were claimed, both sums being paid without demur or expostulation on the part of the patients or their friends. Amongst the English practitioners (now about fourteen in number) established in this capital, a standard somewhat higher than the French average prevails. The consultation-fee is 40 francs; that for a single and casual visit, 20 francs; and during a prolonged attendance, 10 francs.—*Lancet.*

PUBLICATIONS RECEIVED.

Clinical Lectures on the Diseases of Women and Children. By Gunning S. Bedford, A.M., M.D. Seventh edition, carefully revised. New York, 1862.

Border Lines of Knowledge in some Provinces of Medical Science. An Introductory Lecture, by Oliver Wendell Holmes, M.D. Boston, 1862.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 3d day of February to the 10th day of February, 1862.

Deaths.—Men, 87; women, 76; boys, 123; girls, 136—total, 422. Adults, 163; children, 259; males, 213; females, 212; colored, 5. Infants under two years of age, 162. Children reported of native parents, 18; foreign, 195.

Among the causes of death we notice:—Apoplexy, 5; Infantile convulsions, 40; croup, 17; diphtheria, 9; scarlet fever, 33; typhus and typhoid fevers, 10; cholera infantum, 0; cholera morbus, 0; consumption, 67; small-pox, 10; dropsy of head, 16; infantile-marasmus, 22; diarrhœa and dysentery, 4; inflammation of brain, 15; of bowels, 9; of lungs, 36; bronchitis, 5; congestion of brain, 6; of lungs, 8; erysipelas, 2; whooping cough, 4: measles. 2. 251 deaths occurred from acute disease, and 26 from violent causes. 312 were native, and 110 foreign; of whom 76 came from Ireland; 7 died in the Immigrant Institution, and 42 in the City Charities; of whom 15 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Feb. 1862	Barometer. Mean height.	Barometer. Daily range.	Temperature. Mean	Temperature. Min.	Temperature. Max.	Difference of dry and wet bulb. Thrm. Mean	Difference of dry and wet bulb. Thrm. Max.	Wind.	Mean amount of cloud.	Humidity Sat'tion, 1000
	In.	In	°	°	°	°	°			
2d.	30.31	.21	28	22	33	5	7	N.W.	0	681
3d.	30.30	.24	22	18	26	2	3	N.	8	844
4th.	30.21	.17	26	20	32	3	4	N.	8	777
5th.	30.30	.14	24	20	30	5	9	W.	0	661
6th.	30.00	.29	36	30	45	3	4	S.	7	792
7th.	29.93	.21	37	31	45	5	9	W.	7	704
8th.	29.99	.10	32	25	38	4	6	W.	3	799

REMARKS.—2d, Wind fresh A.M. 3d, Variable A.M., snow P.M. 4th. Hazy at sunrise, light snow P.M. 5th. Very fine day. 6th, Wind changed A.M. to S.E., light rain P.M., clearing late at night. 8th, light snow evening. Rain and melted snow for the week, seven-tenths of an inch on a level.

MEDICAL DIARY OF THE WEEK.

Monday, Feb. 17.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Thomas, half-past 1 P.M.
- Eye Infirmary, 12 M.
- Section Theory and Practice Medicine, 8 P.M.
- Obstetric Section, 8 P.M.

Tuesday, Feb. 18.
- New York Hospital, Dr. Parker, half-past 1 P.M.
- Bellevue Hospital, Dr. Loomis, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Wednesday, Feb. 19.
- New York Hospital, Dr. Cock, half-past 1 P.M.
- Bellevue Hospital, Dr. Sayre, Is. Hos., half-past 1 P.M.
- Eye Infirmary, 12 M.
- Academy Medicine, half-past seven.

Thursday, Feb. 20.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Taylor, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Friday, Feb. 21.
- New York Hospital, Dr. Parker, half-past 1 P.M.
- Bellevue Hospital, Dr. Flint, half-past 1 P.M.
- Eye Infirmary, 12 M. Dr. Noyes's Lecture, half-past 1 P.M.

Saturday, Feb. 22.
- New York Hospital, Dr. Cock, half-past 1 P.M.
- Bellevue Hospital, Dr. Wood's Clinic, 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICES.

New York Academy of Medicine.—*On Wednesday Evening, February 19th,* Dr. Moses H. Ranney *will read a paper on "Epilepsy, a Brief Disquisition on its Nature and Treatment, designed as a plea for a more careful Investigation of all its Phenomena."*

The Obstetric Section *will meet at the residence of the Chairman elect,* Dr. S. D. Hubbard, *No.* 47 *Ninth st., on Monday, Feb.* 17, *at* 8 *P.M.*

Section of Theory and Practice of Medicine.—*The Stated Monthly Meeting of the Section of Theory and Practice of the New York Academy of Medicine, will be held at the house of the Chairman,* Dr. J. Bolton, *No.* 18 *East Fourteenth st., on Monday next,* 17*th inst., at* 8 *o'clock P.M. Subject for discussion, "Diabetes." A full attendance desirable.*

To Physicians.—Timolat's Old Established SULPHUR AND VAPOR BATHS. Introduced in 1820 by L. J. Timolat, from Paris, at No. 1 Carroll Place, Bleecker street, corner of Laurens street, New York. Given daily by

A. L. TIMOLAT & CO.

Rensselaer Polytechnic Institute,

Troy, N. Y.—The seventy-sixth semi-annual session of this Institution for instruction in the Mathematical, Physical, and Natural Sciences, will commence Feb. 19th, 1862. A full course in Military science is now in progress.

Further information, with the Annual Register, can be obtained of Prof. Charles Drowne, Director.

Sent Free by Mail on Receipt of Price.

A Practical Treatise on Military Surgery. By Frank Hastings Hamilton, M.D., author of a Treatise on Fractures and Dislocations, Surgeon-in-Chief to the Long Island College Hospital, Surgeon to the Bellevue Hospital, New York, Professor of Military Surgery and of Diseases and Accidents incident to Bones, in the Bellevue Hospital College. 8vo. Price, $2 00.

This work embraces a consideration of the Examination of Recruits, the Hygiene of Troops, relating to Diet, Dress, Exercise, &c.; Accommodation of Troops in Tents, Huts, Barracks, &c.; the Construction and Location of Hospitals; Preparations for the Field; Flying Ambulances, Litters, &c., also, Gunshot Wounds, Amputations, Hospital Gangrene, Scurvy, &c. United States Army Regulations, with many other matters pertaining to Military Surgery.

Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

On Diphtheria. By Edward Headlam Greenhow. 1861. Pp. 160. Price, $1.25.

Our readers will find a very large amount of information in the twelve chapters of which the volume is made up. Perhaps, in the present state of our knowledge on the subject of this obscurely understood disease, little more can be said beyond what may here be found written down.—*London Medical Times and Gazette.*

We have only been able here to refer to certain of the more prominent facts concerning diphtheria; but we believe we have said enough to recommend this well-written treatise to the attention of the profession.—*British Medical Journal.*

Bailliere Brothers, 440 Broadway.

Sent Free by Mail on Receipt of Price.

Text-Book on General Physiology

for the use of schools.

A KNOWLEDGE OF LIVING THINGS WITH THE LAWS OF THEIR EXISTENCE. By A. N. Bell, A.M., M.D. One handsome volume of 318 pages, 12mo., illustrated by sixty wood engravings and two colored plates. Price One Dollar.

N.B.—The work was originally published at $1.50. It is *reduced in price* so that it may compete more favorably with other Text-Books.

Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Ten Lectures Introductory to the Study of Fever, by A. Anderson, M.D. Post 8vo. London, 1861. $1.55.

Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Essays and Observations on Natural History, Anatomy, Physiology, Psychology, and Geology, by John Hunter, F.R.S.; being his Posthumous Papers on those subjects, arranged and revised, with notes: to which are added the Introductory Lectures on the Hunterian Collection of Fossil Remains, delivered in the Theatre of the Royal College of Surgeons. By Richard Owen, F.R.S., D.C.L. 2 vols. 8vo. London, 1861. Price, $10.00.

Bailliere Brothers, 440 Broadway.

Sent Free by Mail on Receipt of Price.

Traite d'Anatomie Pathologique Generale Tome 4 in 8vo. Paris, 1861. $2.35.

Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

A Manual of Etherization:

Containing Directions for the employment of Ether, Chloroform, and other Anæsthetic Agents by Inhalation in Surgical Operations, intended for Military and Naval Surgeons, and all who may be exposed to surgical operations; with Instructions for the Preparation of Ether and Chloroform, and for testing them for impurities; comprising also a brief history of the Discovery of Anæsthesia. By Chas. T. Jackson, M.D., F.G.S.F. 12mo. Boston, 1861. 75 cents.

Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

A Book about Doctors, by J. Cordy Jeaffreson. 2 vols. 8vo. London, 1861. $6.50.

Bailliere Brothers, 440 Broadway N. Y.

Dr. Charles F. Taylor's Treatment,

BY LOCALIZED MOVEMENTS, OF SPINAL CURVATURES AND PARALYSIS, (AND AS AN AUXILIARY TREATMENT) OF MOST CHRONIC DISEASES, EMBRACES THE FOLLOWING PRINCIPLES:—

1. LATERAL CURVATURE OF THE SPINE

Sample movement for lateral curvature to the right—expanding contracted (left) side, unbending spine, and pressure on projecting (right) shoulder.

Is caused by *unequal action* of the spinal muscles, generally (but not always) accompanied by muscular weakness. Sound sense and experience prove that supporters, by preventing muscular action, increase the weakness and aggravate the disorder: while gymnastics, acting on all muscles alike, can, at most, only benefit the general health, but cannot correct relative disproportions of muscular strength. A CURE would consist in such *regulated* action of the muscles as, in accordance with the anatomy of the body and peculiarity of the deformity, would expand the contracted muscles on the shrunken side, and contract the expanded muscles on the projecting side, and, by introducing a series of muscular actions *opposite* that which produced the deformity, would thus reestablish a uniform and harmonious action of antagonist muscles, when the deformity would disappear. (See cuts.)

Sample movement for lateral curvature to the right—contracting the expanded (right) side, unbending spine, and pressure on projecting (right) shoulder.

2. PARALYSIS

Is produced by a suspension of the nervous stimulus to the muscles by some cause affecting the nervous centres. The shock may have passed off, or the clot in the brain may have become absorbed, and the paralysis may still, wholly or in part, remain because it requires a special effort to re-establish the connexion of brain and muscles. In ordinary exercise, the unaffected muscles perform the most of the action, while the paralyzed ones perform the least.

This process should be reversed, and the paralyzed muscles made to act while the unaffected ones are at rest. The nerves must be re-educated to perform their functions by sustained, gentle, well directed, and repeated efforts of the will on the affected muscles till the latent powers developed to be an efficient one.

Sample movement for paralysis.—concentrating the *will* on the extensors of the leg, while the rest of the body is at rest.

3. ANGULAR CURVATURE OF THE SPINE

(Pott's disease) consists of actual disease of the bodies of the vertebræ, with loss of substance at the point of disease. The weakened *spine* needs support, but the *muscles* should not be confined.

"Spinal assistant" for *angular* curvature (Pott's disease), provided with hinges (*J, J, J, J, G, G*), which allow the spinal muscles to act.

An original instrument (see cut) is used, so constructed with several hinges which bend backward but not forward, that while the spine is supported and the diseased surfaces relieved from pressure, the muscles of the back are encouraged to act (instead of being prevented, as in all other instruments), and thus the muscles themselves are made the efficient part of the instrument acting over the curvature to reduce it. There is no confinement; it is very adjustable; the pressure is increased and diminished at pleasure, and it is worn with the greatest comfort. The importance of thus developing the spinal muscle, contiguous to the diseased point, cannot be overestimated, as results show.

Instruments for many other affections, such as morbus coxarius, contracted muscles, &c., are contrived on the same principle of providing for motion and the use of the muscles at the same time.

4. THE TREATMENT

(which is based on the Swedish system of Ling), is purely scientific and physiological, and though it is not claimed to be applicable to every case, in many it is very clearly indicated; as, in dyspepsia and constipation, by acting on the stomach and bowels, to give tone to the digestive organs; in consumption, by expanding the chest, distributing the circulation, and increasing the aerating process; in diseases incident to women, by giving general vigor to the muscles, especially of the back, hips, and abdomen, relieving the downward tendency of the organs, and increasing the peripheric circulation, to relieve uterine and other internal congestions.

AND IN ALL CASES the treatment is done, not by the patient's unaided efforts, but by trained assistants, nicely adapting each movement to the strength and needs of each patient, precisely as prescribed by the physician to secure the desired local or general results. There is nothing like "rubbing," "gymnastics," or calisthenics" about it, patients are never fatigued, but from the first are very fond of it.

The co-operation of the family physician, as is mostly the case in this city, is always desired when practicable. Cases likely to be benefited are solicited through the profession.

CHARLES F. TAYLOR, M.D.,
28 COOPER INSTITUTE, NEW YORK.

References:

Drs. J. M. CARNOCHAN,	Drs. J. MARION SIMS,
" GEO. T. ELLIOTT,	" R. F. BARKER,
" HENRY G. COX,	" F. R. PRASLER,
" L. A. SAYRE,	" WM. H. VAN BUREN,

Dr. E. A. HOSACK, and the profession generally in New York.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.

By SAMUEL R. PERCY, M.D.,
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE IV.

IODINE AND ITS COMPOUNDS.

This is one of the most important medicinal agents that I shall have occasion to bring before you. In the limited time remaining to me, I hardly know how to do justice to my subject; it is necessary for me to be brief, and yet in being so I fear I may leave untold much that ought to be said. M. Courtois discovered iodine in experimenting upon the mother liquors of kelp, in 1812. His discovery has been one of the most valuable of the present century, for, although it has not been in general use for more than a single generation, it has conferred inestimable benefits upon millions of suffering persons, and has enabled us to control and relieve diseases that were before beyond our power of cure. Medicine has in this agent given to the arts one of its richest and most brilliant treasures; for by its means Nature's own image is depicted in indelible forms, and the loved features of our absent or dearest lost ones remain present before our eyes, as well as present in our deepest memories. Medicine here gave to the arts a substance without which Daguerre would have been unable to fix the beauteous images painted by the delicate pencil of the sunbeam; and medicine may justly be proud of the wonderful advances of science, for in this as in many other discoveries, she has been their prime cause and most efficient promoter.

Iodine is extracted from the mother liquors of the kelp, which is prepared by drying and incinerating the deep sea plants. It is found that the sea weeds that grow above low water mark are less rich in iodine than those which grow in the deeper parts of the ocean. They also contain a larger proportion of soda, and a less amount of potash, than the deep sea plants. The plant upon the shores of Europe which contains the largest amount of iodine is said to be the palmata digitata, or tangle, and this is found in the greatest abundance upon the coast of Scotland and Ireland. These plants are collected, dried, and burned in rude kilns, and the ash, which is fused into solid masses, is called *kelp*. This kelp is dissolved in water, concentrated by heat, and at a certain density the salts of potash crystallize from it; the soda salts, being more soluble, require further concentration, when they also crystallize from the solution.

After nearly all the potash and soda salts have been removed, there remain in the mother liquor impure iodides and iodates of soda and potash, which are decomposed by adding sulphuric acid to neutralization. The liquid is then thrown into a still for sublimation, heat applied, oxide of manganese added, and all the lutings carefully closed: the sublimation is conducted slowly, and the iodine, in an impure form, is found in the receivers. The yield will average about ten pounds of iodine for every ton of kelp employed, though when the kelp is prepared with care, twenty pounds of iodine are sometimes obtained from a ton. The yearly value of this kelp prepared in Scotland, Ireland, and France, is estimated at about $470,000, and of this amount $300,000 is the value of the iodine. The quantity of iodine obtained is about 100,000 pounds a year. This, on account of its impurity, is carefully resublimed. Iodine is found in other substances besides the sea weeds; before the discovery of iodine, burnt sponge was used for some of the purposes for which iodine is now employed. It exists in minute quantities in sea water, and owing to this fact, it is found in the oil and fat of all animals and fish living in the ocean. It is found also in some of the salt springs, and in many of the medicinal waters. It has lately been ascertained that it exists in considerable quantity in the Peruvian nitrate of soda, and it is probable that its extraction from this substance will be remunerative.

Iodine is in brilliant crystalline scales or plates, with a bluish-black metallic lustre; the scales are soft, and are easily broken. Its odor somewhat resembles chlorine, though it is less suffocating. Its taste is acrid and unpleasant. It is a non-conductor of electricity, and a negative electric. Its specific gravity is 4·95, and its chemical equivalent 126·3. It evaporates at ordinary temperatures, especially when damp. It sublimes at a heat below 212°, fuses at 225°, and boils at 347°. Its vapor is of a beautiful violet color, hence its name. It is soluble only in 7000 times its weight of water, to which even in this quantity it communicates odor and color. Its solubility in water is very greatly increased by adding chloride of sodium, nitrate of ammonia, or iodide of potassium. It dissolves in alkaline solutions, forming iodides and iodates. It is very soluble in ether and alcohol. Its range of affinities is very extensive, as it combines with most of the non-metallic, and nearly all the metallic elements.

Iodine in any considerable quantity can be detected by its characteristic purple vapor; but when in very small quantities, may be detected even to 450,000 times its weight in water, by the blue color it imparts to starch. Of this test we will speak more at large hereafter.

Adulterations.—Iodine in small quantities is frequently adulterated by dishonest venders, but as it comes from the manufacturers its chief impurity is water, of which it sometimes contains as much as twenty per cent. It is difficult to separate the water from it completely, but it should not contain over two or three per cent. Iodide of cyanogen is generally present in the commercial, but not in the purified variety.

Physiological Effects.—Iodine is but seldom administered in a pure state, but is generally given in combination; but even if administered in a state of purity in medicinal doses, it no doubt quickly enters into organic or saline combinations, and in this way becomes milder and less irritant both in its local and general effects. Its local action is that of an irritant, whether applied to the mucous membranes or to the cuticle, and this effect may result whether applied in a solid, liquid, or aeriform state. It is at times very difficult to tell in what manner iodine affects the system, for it may be administered in small doses for a length of time without producing any noticeable alterations either in the functions of organs or on the secretions. There are many instances in which it is given for weeks, or even months, with no other perceptible effects than the amelioration or removal of the disease for which it is taken. In these small doses it generally improves the appetite, and this improvement continues until the system seems to be saturated; it then produces gastric disturbance. Even in large doses, its first effects are often a great improvement of appetite; but in these doses are continued, there is anorexia, general symptoms of dyspepsia, unpleasant eructations, gastric irritability, frequently attended with colic and diarrhœa; the pulse becomes frequent and irritable, the tongue furred, the skin hot and dry, the respirations are more frequent, there is a peculiar sense of constriction and irritability about the throat, and much headache. If the medicine is discontinued, these effects soon pass over. As to its physiological action on the secretions, its effects are very variable. Some persons notice a large increase in the quantity of urine, while others state that the secretion is diminished, but that the flow of saliva is greatly increased. Again, it is said by some to largely increase the secretion of bile. It has been asserted that long-continued administration of iodine produces absorption of the mammæ and testicles, and there are probably a few cases reported where these glands have become atrophied and diminished; but such cases are

very rare, for Magendie, Lugol, and Pereira state that they have never met with such a result. By administration of iodine in full doses there is an effect occasionally produced called *iodic intoxication* or *iodism*, in which the nervous system is disordered, giving rise to headache, palpitation, ringing in the ears, dimness or disordered vision, irritability, fever, and wakefulness. Lugol, who administered iodine more largely than any one in his day, frequently produced these symptoms, not only by its internal use, but by means of iodiretted baths. Manson also mentions similar cases. But these symptoms are the results of careless administration, and need not be, and I think are not frequently produced at present.

Modus Operandi.—Iodine is rapidly absorbed into the circulation, and can be detected in the secretions. From many experiments that have been performed, it appears, that it is first to be detected in the saliva, then in the urine; sometimes it may be detected in the perspiration, but not as a rule, unless it has been taken for some time. Claude Bernard injected it into the jugular vein of a dog, and detected it immediately in the saliva, though it was not to be found in the urine until after the expiration of several hours. Schottin also found it in the saliva in a few minutes after administration, after some time in the urine, but in the perspiration it was not found until the fifth day. He gave half a drachm daily of iodide of potassium. Cantu has found it in the urine, sweat, saliva, milk, and blood. Meeting a few years ago with a person who had a salivary fistula, I tried some experiments to ascertain the rapidity with which iodine could be detected in the saliva and urine. I administered half a drachm of iodide of potassium in powder enveloped in a small piece of bibulous paper, which was put into the throat and immediately swallowed and followed by a gill of water. The bladder had been previously emptied, and a small catheter introduced. The salivary secretion was immediately wiped away with a clean wet cloth, and one minute after the water was swallowed the saliva was collected and allowed to run into the spoon for two minutes. It was tested and gave evidence of the presence of the iodide. At the expiration of five minutes the urine was tested, but gave no traces; but in seven minutes after drinking the water, the urine ran off more freely, and all that passed from the seventh to the tenth minute was tested and showed the presence of the iodide. The iodide could be detected in the saliva thirty hours after administration, though not a trace of it could be found in the urine. At another time I administered to him twenty drops of a saturated solution of tincture of iodine in gelatine capsules, followed as before by a gill of water. In three minutes it was found in the saliva, but it was twenty-two minutes before it was found in the urine. Pereira thinks that it produces its action upon the system by liquefaction of the blood. Billing states that it produces contraction of the capillary vessels, and others attribute its effects to direct stimulation (or rather increased action) of the absorbent system. There is but little doubt that all of these effects are produced, and the gentlemen who have advanced these separate theories have not adopted the usual custom and overstepped the mark, but have fallen short of it. In adopting the classification of Headland, and placing iodine in the third order of the second division of hæmatic medicines, we have already proved to some extent that he has correctly placed it under the division catalytics. We have given proof that it is absorbed into the blood through the coats of the stomach and intestines, that it enters into the portal circulation with great rapidity, and is found in a short time in several of the secretions, and also in the excretions; thus fulfilling the action of this class of remedies, by first entering into the circulating fluid, and counteracting a morbid material or process, and then passing out of the body. We have also given proof by the experiments performed with tincture of iodine that it has undergone a change in the system, and has entered into new combinations, probably both organic and chemical. Independent of its catalytic effects, it might to a certain extent be placed under the division of restorative hæmatics, for we find it so universally diffused in nature that it must to some extent be one of the constituents of the system. We have proof, then, that before it produces its peculiar action on the system it combines with organic substances, and is absorbed into the circulation; we have also proof, by more than one of its effects, that it hastens and increases the metamorphosis of tissue, and by this means removes from the body the morbid materials which gave rise to the disease. We see also in most instances a perceptible increase in one or other of the excretions, though in this respect it is not always the same. To prove that it hastens and increases the metamorphosis of tissue, let us watch its effects in both small and large doses. We find some morbid material or process in the system which produces a state of ill health; it is foreign to our purpose to inquire whether this material has been introduced into the system from ingesta, or is owing to a deficient power in certain organs to carry off the disintegrated and no longer needed substances. If in this state small doses of iodine are administered the only noticeable effects that it produces is an increased appetite, an increase in the specific gravity of the urine, and an absorption and removal of the materies morbi, with an increase in weight and renewal of health. But instead of giving it in small doses, let us see what are its effects when we administer it in large ones; after the first little increase of appetite caused by its stimulating effects, there is prostration and irritability, with loss of appetite. Absorption of the morbid material also takes place, the urine increases in specific gravity, and emaciation and loss of weight are readily noticed. In both instances we have then an increase in amount and rapidity of the metamorphosis of tissue, and this certainly in the first place without any stimulant action, as we understand the action of stimulants. That it should improve the appetite, and increase the strength and weight, when given in small doses, is readily explained, for we well know that all means that increase a healthy metamorphosis of tissue, call for a corresponding effort of the nutritive process. In the second instance, where large doses are given and the metamorphosis of tissue thereby increased, increase of appetite and weight are prevented by the irritant effects of the medicine on the digestive organs. That it acts by increasing the metamorphosis of tissue we see also by its constant local action. An enlarged gland is painted over externally with tincture of iodine, and under its application the tumor disappears. I know that it is asserted that this is owing to its stimulating or counter-irritating effect; but it is not so, for the tumor is not discussed by application of tincture of capsicum, aqua ammoniæ, or nitrate of silver.

Therapeutical Application.—Although iodine was discovered by Courtois in 1812, it was not used in medicine until 1820; on 25th July in that year Dr. Coindet, of Geneva, read a paper before the Society of Natural Sciences of Geneva on the use of iodine in the cure of goitre. He was led to investigate the action of iodine on goitre from the known beneficial effects of burnt sponge in that disease, the curative effects of which were entirely owing to the small amounts of iodides and iodates contained in the ashes. As iodine was found so efficacious in goitre, it was soon used with equally beneficial results in scrofula; and to Brera, Lugol, and Manson, we owe much of the knowledge we now possess of it in this disease. As it was a new remedy and really possessed extraordinary and valuable powers, it was employed by many in every kind of disease, and by some vaunted as a universal specific, and by others condemned as injurious and useless; but as we learn more of its physiological action and modus operandi we know better how to determine its real value. Dr. Williams, of the London College of Pharmacy, first announced its great value in the treatment of the tertiary form of syphilis in 1834.

Local Effects.—Iodine is generally used locally, either in the form of tincture, compound tincture, or in solution in glycerine or collodion; we will give you the most appropriate formulæ for preparing these solutions in the proper place. Iodine was first used as an external application in goitre, and several cases were cured by this means without its internal administration. It has been for many years extensively used as a local application to glandular enlargements, especially those in the various forms of scrofulous disease. It is a very common thing to see children of a scrofulous diathesis with enlarged lymphatic glands, and those about the neck are more frequently diseased than in other parts of the body. Although from experience the physician knows that the local application of iodine is of great service in the treatment of these enlargements, he is frequently prevented from applying it because it leaves a yellow unpleasant-looking stain upon the skin. This appears in some instances to be an objection to its use, for young ladies are unwilling to have so conspicuous a mark upon them, but this difficulty may be nearly always overcome by wearing a broad velvet band around the neck, and upon the spot where the band covers the tumor a piece of oiled silk should be placed; this cover of oiled silk assists the action of the iodine.

It has been used very extensively of late years as a local application in strumous ophthalmia. In this disease the little patients are very frequently troubled with great intolerance of light; in addition to the other treatment that is required, tincture of iodine is applied over the orbit and occasionally around the eye, and very great benefit is experienced from the local application. I have on several occasions seen perfect relief within twenty-four hours, by the local application of iodine alone in this photophobia scrofulosa. I have no doubt you all avail yourselves of the excellent opportunities afforded you for instruction at the New York Eye and Ear Infirmary; you also have peculiar and unusual opportunities of studying diseases of the Eye and Ear under the able teachings and clinical explanations of your earnest and learned Professor of Ophthalmic and Aural Surgery. You have at these clinics, and at those of the Eye Infirmary, seen many little patients whose first appearance denoted the trouble under which they were laboring. Every effort is made by them to exclude the light; and the hanging head, knit brow, and elevated upper-lip and nose, are legible marks of this strumous ophthalmia, accompanied with photophobia. In many of these cases you will be astonished to see such an amount of intolerance to light, with so little visible symptoms of disease within the eye itself. In these cases you will find marked benefit by the local application of compound tincture of iodine over the orbit and around the eye; underneath the eye you should make but one slight and quick application of it, but over the orbit apply it until the skin is deeply colored with it, and over the whole make one application of iodine in collodion. Insist upon the child being kept as much as possible out of doors, and you will frequently see in twenty-four hours a removal of the unpleasant symptoms. In scrofulous otorrhœa local application of the same substances behind the ear are equally beneficial as in diseases of the eye, but in both of these affections be careful not to apply the iodine on the inflamed and excoriated skin over which the unhealthy discharge has been flowing; and above all, be careful not to let the tincture run into the eye. In scrofulous persons the tonsils are nearly always enlarged; a local, internal application of tincture of iodine is generally more successful in removing the enlargement than any other application. But there are many instances, with children, where an internal application cannot be made; in these cases an external application over the tonsils will in time relieve the difficulty. In swellings about the large joints, especially those of a chronic character, free and frequent application of the iodine will be found of great advantage. It will be equally serviceable also in the swelling of the smaller joints and in paronychiæ. It is frequently used with advantage to swollen bursæ, corns, chilblains, furuncles, etc. When thoroughly applied in the first stage of non-syphilitic inflammation of the inguinal glands, it will generally check the inflammation and prevent suppuration. In the early stage of inflammation of the breast it will frequently arrest its progress. It has been recommended on good authority as an excellent application directly to the wound in the bites of snakes and venomous reptiles.

(To be continued.)

Original Communications.

ON CERTAIN OF THE

ACCIDENTS WHICH MAY FOLLOW VACCINATION.

By HENRY M. LYMAN, M.D.,

HOUSE SURGEON TO BELLEVUE HOSPITAL.

Sixty years have passed away since the practice of vaccination was publicly inaugurated at the small-pox hospital in London. Till the close of the eighteenth century, variola was a disease from which no person could ever consider himself secure; yet, when Jenner announced that discovery which has rendered his name immortal, his statements excited the incredulity, contempt, and unmistakable hostility, not only of the uninitiated vulgar, but even of men of education and established reputation. In London was organized a society which appealed to the public to second its efforts in behalf of humanity against the "curse of cow-pox." Fearful narratives of death resulting from vaccination were published, and widely circulated by the opponents of Jenner. The physician to the hospital at Chelsea, Dr. Mosely, asserted that he had seen children "die of cow-pox without losing consciousness of torment till their last gasp." Dr. Rowley, physician to the Marylebone Infirmary, published the details of fifty-nine cases of death by "cruel vaccination," and declared it his belief that "when humanity shall reflect upon the crowd of victims diseased for life, who for ages yet to come will transmit to their posterity chronic maladies of a bestial origin, it will be enough to freeze the soul with horror. It is the duty," he continues, "of honorable practitioners of medicine to arouse the human race to a sense of the multiple and varied evils that await it under the form of this mild catholicon, this sugared potion, which bears a fatal poison in each destructive molecule." It was gravely asserted that certain vaccinated children had acquired the brutal characters of animals; and, in testimony of the brutalizing and transforming powers of the vaccine virus, at the shop-windows were actually exposed the portraits of persons with the eyes of oxen and the cheeks of cows!

This happened more than half a century ago. The experience of sixty years has refuted the objections of men like Mosely and Squirrell, yet there is still lingering in the popular apprehension a trace of that prejudice which was once so deeply rooted: a prejudice which owes its perpetuity to an imperfect comprehension of the relations that exist between a cause and its effect. The zealous *anti-vaccinarian*, who so confidently presumed the brutalizing consequences of inoculation with matter from the udder of a diseased cow, felt no fear of similar consequences as the result of the daily use of milk drawn from the same animal, nor did he hesitate over meat from the same pasture. It were more reasonable to suppose that the brute form and the human form of a disease that might be common to man and to the lower animals, would be marked by such differences only as are analogous and proportioned to the difference which exists between the human organization, and the organization of the brute; in other words, that the exciting cause will produce, in both cases, effects which shall be the same, plus or minus the essential difference between man and brute.

But, however that may be, the prejudice does exist; and, even among people who do not resort to public institutions of charity, vaccination is often blamed for many a congenital defect of body or mind. It is asserted that scrofula, erysipelas, syphilis, idiocy, imbecility, and a host of other ills, are not unfrequently transmitted from person to person by the act of vaccination—evidently the old objection couched in modern language.

Now, though no enlightened person will coincide with the opinions of those who would charge upon the act of vaccination so many of the ills to which flesh is heir, a due consideration of the subject constrains us to admit that there is a color of truth in the objections which have been raised against the practice. *Children*, and grown persons too, *have died* after vaccination, *without losing consciousness of torment till their last gasp;* an untimely end has terminated the protracted misery of individuals whose life was serene till the poisoned lancet introduced into their veins the germs of a disease more accursed than any other that afflicts the human race. At the same time it becomes evident that many of these accidents have resulted from causes that are easily avoidable, while not a few result from the operation of the same laws that regulate the most ordinary pathological events. That we may fully appreciate this fact, it is in the first place necessary to secure a clear understanding of the essential characteristics of the vaccine disease, as it manifests itself in the form of a localized inflammatory process occasioned by the infliction of a poisoned wound. The natural history of the disease itself is learnedly described by a multitude of authors: it is, for the present, sufficient to remember that after inoculation with vaccine lymph the wound remains quiet for about three days. On the third or fourth day it becomes congested, and a papule is formed by this congestion. During the four ensuing days the papule is converted into a vesicle by the exudation of serum and coagulable lymph. It is not before the ninth day that the stage of true pyogenic and ulcerative inflammation is reached; soon after which, the inflammatory process being completed, cicatrization occurs, and the scab is discharged, between the eighteenth day and the twenty-first.

Having, then, to deal with a process which, though specific in its nature, is a truly inflammatory process, it is right to infer that if it be excited in the presence of any abnormal conditions, it will be modified in accordance with the laws which are ordinarily called into operation by the existence of such abnormal conditions, and that it is through an acquaintance with the nature of these modifying conditions that we may hope to find the way of escape from the dangers to which the process is liable.

These modifying conditions arrange themselves in two natural classes:—conditions which affect the essential nature of the existing cause (the vaccine virus), and conditions which determine the physical structure and constitution of the individual in whom the process is exhibited;—their tendency, when unfavorable, is in the same direction, resulting in the most frightful exaggeration or even the entire perversion, of the original inflammatory affection.

It is to the first of these categories that our patients refer their complaints when unfortunate consequences follow the act of vaccination: it is by a cautious avoidance of the causes contained in the first, and by a judicious deference to the conditions of the second, that we who practise the art may hope to secure at least the approbation of an enlightened judgment.

Of the various causes by which the vaccine virus may be rendered noxious, one of the rarest consists in the absorption of deleterious substances endermically applied to the individual from whom the virus is derived. It is related by Dr. Huder (*London Med. Gaz.*, vol. xiii., p. 440) that five children were vaccinated from the arm of a healthy child, which had been vaccinated about seven days previously. Three different clean lancets were used in the vaccination of four of these children; the fifth, living at some distance from the others, was vaccinated by means of ivory points dipped in the fresh lymph. Each one of these five children became, almost immediately, the subject of great constitutional disturbance: in not one of them was anything like a vaccine vesicle produced. Their arms were immensely swelled and œdematous; one child had convulsions; in two of them abscesses formed; and in every instance there was an alarming degree of febrile excitement. It was found, on inquiry, that the child from whom the virus had been taken, was healthy; but on the evening before the vaccination from its arm, the mother had applied a blister behind its ear, for the relief of a pain in that region, which was probably only a temporary effect of the irritation produced by the vaccine vesicles. Notwithstanding the application of this blister, the vesicles had seemed to be perfect when lymph was taken from them the next day, and, with the exception of a slightly unusual degree of opacity, the virus had appeared to be in a proper condition for use.

These cases are remarkable, and, were they unique, might easily excite our suspicion that some predisposing cause other than the concurrent action of cantharides and the vaccine virus, was the real agent in the production of such an unruly inflammation. It was, however, observed in France early in the present century, that the mode of vaccination by means of a blister or a thread was more than any other mode liable to be followed by suppuration and spurious pustulation. M. Hussou, a writer in the *Dictionnaire des Sciences Médicales* (vol. lvi., p. 423), records the history of two persons who were vaccinated by the application of lymph to a surface which had been blistered with cantharides. Serious ulceration was occasioned in each instance; the wound became greatly inflamed, and degenerated into ulcers which, at the end of the sixth day, were sloughing extremely. It was only after the expiration of two months of active treatment that these patients recovered.

Another cause of danger consists in the mingling of purulent matter with vaccine lymph, a circumstance which usually results from the use of virus drawn from a pock which has reached the stage of pustulation. The formation of pus ordinarily occurs about the eighth day, consequently it is impossible after that date to procure a pure albuminous lymph. The nature of this pus will be influenced by all the circumstances which affect the individual who is the subject of the inflammatory process, and is, consequently, liable to vary, from the blandest of fluids to an irritating liquor that shall resemble the most virulent of poisons. Such an accident is of course rare at the present time, but it not unfrequently occurred during the early experience of vaccination. The first instance on record fell under the observation of Dr. Wollastou (*Med. and Phys. Journal*, vol. iv., p. 488), who saw nine persons, residents of a parish near London, who had been vaccinated Oct. 31st, 1800, with matter taken from a vesicle at a very late period in its course. The virus had a purulent appearance when it was taken from the arm. This inoculation produced extensive erysipelas, which spread rapidly from the point of vaccination, accompanied in many instances by considerable constitutional affection, which was followed in most of the cases by an ulcerative process, and in some by a tendency to gangrene. Of a large number of persons who were vaccinated, about the same time, with *other* lymph, not one experienced the slightest evil effect. Two other persons, who had been vaccinated eight days previously, manifested the same unfavorable symptoms after an attempt to procure lymph from their vesicles with the same lancet. None of these cases proved fatal, though their course was painful and tedious. Occurring at an early period in the history of vaccination they attracted much attention at the time, and a committee of medical gentlemen was appointed to examine the particulars of so unfortunate a result. That the symptoms were occasioned by introduction of a morbid poison into the system cannot be doubted. The vesicle from which the lymph was taken had assumed a pustular

character; that its contents had undergone some poisonous modification appears equally certain. Had the lancet been originally in fault, the person from whom the matter was taken would have been as liable to unfortunate consequences as were the two persons from whom lymph was afterwards taken with the same instrument.* Had any epidemic or accidental cause been active at the time, it is morally certain that other vaccinated individuals would have been affected in like manner. The precise nature of the transformation undergone by the virus is of course unknown: it is concealed by the same veil of mystery that envelops the whole subject of morbid poisons.

That the purulent contents of a broken-down vaccine vesicle may produce the most serious results, when inoculated into the system, is further illustrated by the following extract from the writings of Dr. Waterhouse of Cambridge, Mass., one of the pioneers of vaccination in the United States:—"During the autumn of 1800, a singular traffic was carried on in the article of kine-pox matter, by persons not in the least connected with the medical profession. * * * I have known the shirt sleeve of a patient, stiff with the purulent discharge from a foul ulcer, made so by unskilful management, and full three weeks after vaccination, * * * cut up into small strips, and sold about the country as genuine kine-pox, coming direct from me. Several hundred people were inoculated with this caustic animal poison, which produced great inflammation, sickness, fever, and, in several cases, cruptions."† (*Med. Repository*, vol. v., p. 375.) It is very probable that many of these cases were much aggravated by putrefactive decomposition of the lymph which was thus carried from place to place, without precaution against the effects of heat and moisture; a consideration which naturally directs our attention to a third cause, by which virus may be rendered noxious. Like all other substances of animal origin, it is liable to putrefaction when exposed to the air, during which process a poisonous element, analogous to the *cadaveric poison* evolved in bodies after death, is called into existence. Inoculation with this decomposing lymph has been attended with the most disastrous effects. Mr. Wakley (*Lancet*, July 10, 1852), saw two infants, one aged six months, the other two months, who were vaccinated at the same time with lymph supplied by the London Vaccination Hospital. The lymph had been taken from a healthy child, on the eighth day, and had been deposited for preservation on a sharp pointed cone, that formed a part of the stopper of a bottle. In both cases, the arm soon became greatly inflamed; the eldest child died on the fourteenth day with sloughing of the wound; the younger infant recovered after a long illness, attended with formation of abscesses in the joints and in other parts of its body. The remaining lymph was submitted to a microscopical examination, which proved that it had been completely decomposed, and was unfit for use, though it had been taken between thirty and forty hours only previous to its employment for the vaccination of these children. The victims of a similar misfortune recently occurring in our own country were more numerous, as appears from the Records of the Middlesex North District Medical Society.‡ About the 1st of February, 1860, the authorities of Westford, Mass., procured from the city physician of Boston, a number of vaccine scabs which were certified to be from clean and healthy children, perfectly free from extraneous matter, of a bright mahogany color and as good, apparently, as any ever used in Boston. These scabs were placed in the hands of a physician, residing at Westford, who proceeded to make use of them in the following manner:—On the 13th of February, two or three of these scabs were dissolved with snow-water in a phial; on the next day a thread was put into this solution, and was allowed to soak in it. A small portion of the thread was introduced with the dissolved lymph into the arm of each person who was vaccinated, *the phial being, in the meantime*, carried *about in the pocket of the physician*. During the week following, nearly fifty persons were vaccinated with the virus thus prepared, of whom all experienced bad results in a greater or less degree of erysipelatous and gangrenous inflammation. In no case was the true vaccine disease excited; from the very first moment after insertion of the virus, pain, and a tendency to inflammation of a low grade, were present. A large number were rendered seriously ill; and three persons, who were past the prime of life, and who were in feeble health, died in consequence of the terrible severity of the disease which had been thus excited. The symptoms were precisely those which follow inoculation with the cadaveric poison of the dissecting-room—a fact which a moment of reflection would have easily anticipated. We can only wonder at the carelessness, to use the mildest form of expression, of a person who could use, for purposes of vaccination, matter that was so unmistakably putrid, that "it emitted a most offensive smell when the cork was removed from the phial in which it was kept."*

* The great difficulty with which a poisoned instrument is cleansed is well known to all who have practised dissection.

† An example, quoted by Dr. Bradey from the ancient experience of inoculation for small-pox, bears directly upon this subject: "A professional gentleman of the first rank in London, many years ago inoculated a child with variolous matter so very far advanced that he took it from under a scab. It produced a very violent erysipelatous inflammation in the arm, which gradually extended almost over the whole body. The arm ulcerated, and the disease terminated in an anasarcous swelling of the left leg and thigh, and lasted six months. It yielded at length to sea-bathing, when the child was again inoculated with *perfect* variolous matter, which produced the small-pox as completely as if the constitution had not felt the influence of the imperfect." (*Med. and Phys. Journal*, vol. iv., p. 489).

‡ *Boston Med. and Surg. Journal*, March 8, and March 24, 1860. See also the *Taunton Daily Gazette*, March 12, 1860.

CHARACTERS OF DIPHTHERIA.

By A. C. HAMLIN, M.D.
SURGEON 2D REGIMENT MAINE VOLUNTEERS.

It is a well established fact that the types of diseases observed in great armies are often so mingled and masked, that we cannot discriminate them clearly, or even classify, without giving to them a compound name. This mysterious blending or alteration of character is not confined to a single order or class of disease, and neither are the monorganici or zymotici alone affected. Many ascribe this singularity to pythogenic causes or miasmatic influence; but Armand, of the Imperial Guard, maintains, by reason of experiences and observations in Algiers, Italy, and the Crimea, that, for a solution of the question, we must look to those variations of temperature which he calls thermo-electro-hygrometric, etc.

In regard to these phenomena and to the hypotheses of Armand, we propose to discuss them from time to time in a series of casual notes, with such data as fall and have fallen within our limited range, trusting that a few golden grains may be found amid the chaff.

Since the commencement of the campaign, some thirty cases of diphtheria have been observed by us, most of which have been so obscure and complicated as to render diagnosis perplexing, and often inclining us to doubt whether the malady merited a distinction from some other phlegmasiæ of the throat by reason of functional symptoms and physical signs. Rarely did it commence with the pellicle of Bretonneau, though it afterwards assumed many of the peculiarities of the disease in an advanced stage. Sometimes the exudation appeared like cryptogamous vegetation; then, again, there were ulcerated fissures or irregular patches with flake-like lymph. All the cases appeared during or after wet and stormy periods, when the atmospheric variations were sudden, and the electric oscillations considerable. All ended in resolution, without serious injury

* During the fall and winter of 1859, several persons in New Hampshire were vaccinated with scabs which had been previously dissolved in water. They were made quite sick for a long time, having unhealthy sores with eruptions at and near the points of vaccination. These sores were difficult to heal, and remained for weeks, in some cases for several months. In no case did the arm, after recovery, present any indication of the occurrence of true vaccine disease. (*Boston Med. and Surg. Journal*, June 7, 1860.)

to the system except one, in which instance death ensued from hæmorrhage of the palatine or pharyngeal arteries. The enlargement of the cervical glands was often very great, with occasional abscess; but yielding to stimulants and absorbents, it gradually returned to natural size. The attending pyrexia and constitutional disturbance were in most cases slight.

The treatment varied from strict antiphlogistic to stimulant, or to a combination of both, which seemed to be the most efficacious. When the ulcerations were clear of fibrinous exudation, strong solutions of nitrate of silver produced their accustomed healthy effect; but whilst it remained (and often it could not be detached) the strongest cauterization of iron or silver made no impression, as they were not able to penetrate the effused lymph. But small fragments of ice, held in the mouth in contact with the disordered portion, proved of the greatest value when used in conjunction with stimulating embrocations around the neck.

The last case is yet under observation, and may not be uninteresting.

Private C., æt. 19, 2d Maine, joined the National forces in Virginia, late in December, as new recruit; was attacked with rubeola, shortly after with severe typhoid symptoms, but became convalescent after a few days' treatment. Three days passed in good progress, when soreness of the throat and difficult deglutition were experienced. Examination disclosed buccal and palatine membranes, velum, and fauces, red and vascular, tonsils swollen, muscles of the neck stiff and painful, sub-maxillary gland enlarged on left side, tongue red and clean at point, but "langue perroquet" at base (typhoid trace), respiration good, appetite affected, pyrexia slight.

Treatment.—Chlorate of potass gargles, iodine embrocations externally, inhalations of steam, and carb. ammonia and brandy internally, high diet. 26th.—Disease progressing rapidly, pellicle appearing on left tonsil, cauterization with solid nitrate of silver, continuation of previous treatment. 27th and 28th.—Disease increasing, both tonsils now covered with patch of tenacious and membranous exudation (inodorous by chlorate of potass), both maxillary glands much enlarged, deglutition very difficult, respiration fair, anorexia, debility increasing, courage good. 29th—No improvement, caustics discontinued, and small fragments of ice were placed in the mouth near the affected parts every half hour; no other change in treatment. 30th.—Slight improvement, glands lessening. 31st.—Deglutition and appetite improved, small quantity of milk drunk, debility great. Feb. 1st.—Attacked with profuse diarrhœa during the night, and at morning appeared extremely weak, unable to speak except in whisper, throat much swollen, less painful and less red and vascular, exudation apparently unchanged, stomach very irritable and unable to retain anything but milk, bitter infusion with bi-carb. soda every four hours, camphor and opium frequently to check diarrhœa, sponge-baths of whiskey and water along spinal column to arouse nervous energy, courage faltering. 2d.—Diarrhœa unchecked, anorexia complete, frequent vomiting, extreme nervous and muscular prostration with feeble and quickened pulse, deglutition and respiration good, glands much lessened in size, eye sunken and glassy, brow contracted, face pale and haggard, with peculiarities of facies Hippocratica, slightly comatose; prognosis, death.

Sponge baths continued, carb. am. and brandy frequently, enema of chicken broth with laudanum three times during the day, blister to epigastrium.

3d.—Nausea less, able to drink a small quantity of milk, diarrhœa checked, throat easy, tongue dry and brown, facial expression and general condition unchanged, treatment same, with small draughts of milk. 4th.—Condition improved, eye brighter, pallor of face less, throat easy, less inflamed, but exudations still fixed, tonsils lessening, treatment continued. From this date the recovery was extremely rapid and without relapse, the appetite returned in force, and with it strength and courage, the exudations gradually passed away without exposing the ulcerated surfaces beneath, or leaving eschars of note.

NEW MANNER OF PLUGGING THE VAGINA.

By E. P. BENNET, M.D.

DANBURY, CONN.

In placenta prævia and in cases of abortion, the life of many a female is saved only by the judicious use of the *tampon*. This operation, so efficient, is many times a troublesome one, both for practitioner and patient, especially when the substances introduced have been saturated with astringent solutions, as they usually should be to render them doubly efficient. In early life I found much trouble in this respect, as the alum, or other astringent, so corrugated the parts as to render their introduction difficult and painful. Now, by using a common glass speculum, all trouble is at once removed. You can pack the vagina to its utmost capacity in a single minute without any trouble or suffering to your patient. In cases of abortion, in two instances where a small portion of placenta remained beyond the reach of instruments, and where hæmorrhage was long continued and alarming, I succeeded in saving the women by plugging the os uteri with a piece of sponge—an operation easily done through the speculum, but almost impossible without it. One of these ladies was and now is living in your city, and was reduced to the lowest condition. This plan may have been pursued by others; but so far as my recollection serves me, I have not seen it mentioned.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, January 8, 1862.

DR. A. C. POST, PRESIDENT, IN THE CHAIR.

BILIARY CALCULUS.

Dr. Finnell presented a specimen of biliary calculus with the following history:—The patient from whom the specimen was removed was a lady, æt. 40, who had been attended by Drs. Joseph M. Smith, Stillé, and Young. She had been ailing for several weeks past with symptoms referable to the stomach; vomiting of large quantities of bile was almost constant, as was also pain in the epigastrium. There was no icterus present, neither any of the other symptoms which belong to hepatic derangement. Death was occasioned by exhaustion. On post-mortem examination, in the situation corresponding to that of the gall bladder, was found a large gall stone, enveloped by a thick cartilaginous membrane. The tissues in the immediate neighborhood were agglutinated together, and the pyloric extremity of the stomach was much thickened; all of which was supposed to have been the results of old and oft repeated attacks of inflammation.

Dr. Eliot referred to the fact which had been communicated to him by one of the attending physicians, viz. that the tongue presented a very red and beef-like appearance.

THREE PLACENTAS IN ONE.

Dr. Finnell presented in behalf of Dr. Furman three placentas joined in one. The case was one of triplets. The first child was delivered without any trouble, the head presenting. Before the delivery of this child the head of the second one was felt through the abdominal walls, and hence twins were promised to the woman. The second child was delivered in the course of an hour after the first, when shortly after a third one presented the foot. The length of the cord of each child varied; in the first it was about two feet, in the second but one foot, while in the third it was the shortest and thickest of all. The chil-

dren, two males and one female, were at last accounts doing well.

LOBULATED INFLAMMATION OF SPLEEN.

Dr. Bauer exhibited a spleen and heart which he had removed from a man 48 years of age. He could give little more than the post-mortem history of the case. The symptoms during the past fourteen or fifteen months divided themselves between cardiac trouble and a deep-seated immovable pain in the left hypochondriac region. On making, by request, the post-mortem examination, Dr. B. discovered the existence of lobulated inflammation of the spleen, a pathological condition of great rarity. On dividing the organ longitudinally a wedge-formed discoloration was discovered at its lower portion. The same thing was noticed at its superior portion, which, however, had not progressed so far as the other towards the perfect development of the true character of the disease. On microscopical examination the appearances were found due to simple fatty degeneration. Dr. B. experienced a great deal of difficulty in finding authorities upon the subject. Very few pathological anatomists made an allusion to it, and Virchow seemed to be the only one who gave a good description of its characters. The wedge-shape of the inflammatory process in the particular portions of the organ was due to the trabecular and convergent arrangement of its stroma. The heart was found diseased. There was a considerable atheromatous deposit around the valves; and also vegetations. The complication of disease of the heart with that of the spleen had been referred to by the authority quoted. He also supposed that the original cause of the disease of the spleen was the escape of some of the endocardial vegetations in the general circulation, which were finally arrested in the small arterial branches supplying the affected lobules.

Dr. Finnell had from time to time presented two or three specimens of spleens illustrating the fibrous disease. They were removed from persons of intemperate habits. There was no heart disease connected with any of these. The diseased masses were more or less scattered through the organ, which was usually about twice its natural size.

RUPTURE OF FALLOPIAN TUBE FROM TUBAL PREGNANCY.

Dr. Bauer exhibited a second specimen, consisting of a portion of the Fallopian tube, removed from the body of a young lady who had been married several years. She had never borne children, and for the last three or four years of her life had suffered from disturbances of the menstrual flow, leucorrhœa, etc. Of a sudden, however, she became affected with very intense pain in the right iliac region, attended with excessive vomiting. No anodyne could give her relief, and she finally sank and died. Suspicions having been aroused as to the possibility of her being poisoned Dr. Bauer was requested by the coroner to make an autopsy. The right Fallopian tube was found ruptured, in consequence of tubal pregnancy, and the whole cavity of the abdomen was filled with blood. Alongside of this rupture was an epiploic appendix lying free in the abdominal cavity.

Dr. Finnell referred in this connexion to two cases of Fallopian pregnancy which he had met with, both of which occurred on the right side. In one, the symptoms were so sudden, and the vomiting so persistent, that poisoning was suspected.

STRICTURE OF ŒSOPHAGUS.

Dr. Bauer presented a specimen of stricture of the œsophagus, removed from a patient whom he had seen but once, that being about three months previous to her death. The history given him then was that about eighteen years previously she swallowed a small cherry-pit, which, becoming arrested in the œsophagus, remained there for some little time. Since this time she had experienced more or less dysphagia, but this symptom only became distressing a short time before she saw Dr. Bauer. On examination, a stricture of the tube was discovered. Inasmuch as the cause of the disease was a simple one, it was thought that dilatation might be resorted to with benefit. As she resided some distance from the city, the suggestions for treatment were sent to the practitioner, Dr. Hammond, who had her in charge. The physician seemed to be successful for a little while, when he discovered that after each passage of the bougie, the œsophagus became hermetically sealed, so that she was unable to swallow even water until two or three hours had elapsed. She died of inanition, and on post-mortem examination there was found an abscess surrounding the œsophagus, and situated just above the point of constriction. In the right lobe of the thyroid gland a large calculus was found imbedded.

Dr. Krackowizer stated that he had seen the same case about three or four weeks before death. It was then difficult to decide which was the most urgent symptom, the dysphagia or dyspnœa. The patient stated to him that for many years past she had been troubled with difficulty in swallowing, which, however, would leave her sometimes for months. Only a very transient benefit seems to have followed the use of the bougie as advised by Dr. Bauer. In attempting to probe the stricture with his finger, Dr. K. brought up some cheesy-looking material, which on microscopic examination proved to consist of epithelial scales, and a great quantity of those fungosities known as oidium albicans. He felt a hard tumor in the region of the thyroid gland, which inclined him to the belief of the existence of epithelial cancer. He, however, thought it very probable, in the absence of the characteristic nests of scales, that the cheesy substance consisted simply of layers of epithelium from the surrounding mucous membrane. He advised, in order to prolong life somewhat, that either œsophagotomy or gastrotomy be performed, but she was afterwards told that it would even then be necessary soon after to resort to tracheotomy, inasmuch as the larynx had been firmly bound down to the adhesions surrounding the stricture. Under these circumstances the patient declined having anything done, and in the course of a couple of weeks after he heard of her death from inanition.

Dr. Post had under his care several years ago a gentleman with stricture of the œsophagus near the cardiac orifice. The patient removed from the city, and a short time after he heard that death had taken place in consequence of inanition, but that just previous to that event a large quantity of pus had been discharged. No post-mortem examination had been made, but he supposed that the abscess, as in the case just cited, was situated in the neighborhood of the constriction, and had a great deal to do in hastening the fatal result.

ENDOSTITIS OF FEMUR, ETC.

Dr. Bauer presented a fourth specimen, consisting of the knee-joint of a lady, æt. 17, which had been removed by amputation. The disease could not be referred to any injury, and had lasted but eight months. During the first three months of its existence, and up to a short time previous to her admission into the Brooklyn Medical and Surgical Institute, there had been very little tenderness and swelling of the joint; she had not suffered from any reflex muscular irritation, and her sleep had not of late been much disturbed. On her admission into the Institute, the knee was found swollen in front and in the popliteal space, but its cutaneous surface was not discolored. There was slight flexion of the joint; and distinct fluctuation over the whole of the diseased part. A puncture was made in it in order to ascertain the nature of the fluid contents of the swelling. Instead of pus escaping, as was expected, fluid blood issued from the opening. The persistent hectic and emaciation of the patient rendered amputation imperative. After the removal of the limb, a regular excavation of the apophyses of the femur was recognised, filled with blood, the source of which was not ascertained. No tuberculous deposit was found. The periosteum had been

raised from the posterior and anterior surfaces of the bone, and on the inner surface of the membrane were evident nature's efforts towards the formation of new bony material. Taking into account all the circumstances of the case, Dr. Bauer was disposed to think that the disease originated in endostitis.

Dr. Wood believed that there had been an abscess of the lower end of the femur, which had disintegrated the bone, and separated the periosteum in the neighborhood from its attachments. This separation, he supposed, had existed for a considerable length of time. All the deposit of bone alluded to could in his opinion be accounted for by the existence of periosteal inflammation. In conclusion, he asked if the spicula had been examined by the micro-scope.

Dr. Bauer did not think that an abscess of the nature referred to could have existed without giving rise to more symptoms than were exhibited during the progress of the disease. Nor does the cavity necessarily indicate an abscess, inasmuch as endostitis likewise produces one by circumscribed fatty decay of the cancellated structure, as he had seen it.

EXSECTION OF KNEE-JOINT.

Dr. Bauer presented a fifth specimen, which he obtained by exsection of the knee-joint of a young girl 17 years of age. She had suffered for seven or eight years with what is generally called "white-swelling," and when she presented herself at the Institute, her knee-joint was distended and filled with liquid. She had suffered very little from constitutional disturbance, complained of no great amount of pain, and very little tenderness of the part. A puncture was made and the fluid, which proved to be pus, was evacuated. Motion of the parts was then made, when the articular surfaces of the tibia, femur, and patella, were noticed to grate against each other. There remaining no other remedy, an operation was deemed advisable. Exsection was determined upon, if the bone should not be found too far diseased. The result of the case proved the correctness of the decision. A portion of the tibia, about half an inch in thickness, and of the femur, about an inch and one-eighth, and the patella, was only removed, the rest of the bones being healthy. The operation was performed ten weeks previous, and the patient has fibrous anchylosis, which in course of time will undoubtedly become bony in character.

The surface of the condyles at one or two points presented an ivory-like hardness, and the question which had interested Dr. Bauer and his colleagues had relation to the fact whether or not this was true eburnation, or simply the dense bony tissue immediately underlying the cartilage.

Dr. Wood was of the opinion that the hardened portions referred to were nothing more than sequestra which had been driven into carious bone, inasmuch as those portions could be moved. He asked Dr. B. if there were any sinuses remaining after the operation.

Dr. Bauer stated that in the first case the sinuses closed in four months, and in the last case there were still present very superficial ones, most probably communicating with dead bone. In both cases the ends of the sound bones were wired together. In the last case he would not be surprised to see from time to time small fragments of bone presenting themselves at the opening, as he expected the portion of bone which was situated between the surface of the femur and the tibia to become necrosed. This same thing happened in the first case.

Dr. Wood stated that he had met with sinuses quite frequently after exsection. He referred to a case he had then under treatment, of exsection of the knee-joint in which a sufficiently long time had elapsed to allow the ends of the bones to unite, but the sinuses still remained open. He enquired with Dr. B. as to the probability of the bones of those referred to forming normal, as the same thing had happened to himself in two instances where wires had been used.

Dr. Post remarked that it was very usual to meet with sinuses after exsection, where no wires were used. In connexion with the subject of eburnation, he referred to a case presented to the society, in which amputation of the thigh was performed for caries of the articular bones of the knee with necrosis of the femur. The portion of the thigh bone sawn through was completely eburnated. The medullary canal at this point, being by this means completely occluded, formed a wall between the caries and the sound bone above. He had seen a number of instances of eburnation of the upper extremity of the thigh bone.

Dr. Wood cited in this connexion the case of a hip-joint which he had exsected last winter. It was originally a case of morbus coxarius, and in connexion with which the superior portion of the shaft to the extent of two and a half inches was eburnated and enlarged in circumference. He also referred to a specimen, previously presented, in which a considerable portion of the tibia was eburnated.

Dr. Post stated that according to his observation necrosis presented less smoothness of surface, and less density, than that which was shown in the specimen exhibited by Dr. Bauer.

Dr. Wood remarked, that he had seen in the phosphoric disease of the jaw, not only the sequestrum but the involucrum a great deal harder, and more dense, than in the portions of supposed eburnation referred to.

Dr. Krackowizer thought that Dr. Bauer's specimen of eburnation showed that exostosis had first taken place, and that the protruding portion had become eburnated.

(*To be continued.*)

American Medical Times.

SATURDAY, FEBRUARY 22, 1862.

THE AMERICAN MEDICAL ASSOCIATION.

The time is drawing near when some action should be had concerning the Annual Meeting of the American Medical Association. In common with many others we deemed it advisable that the last annual meeting should not be held. The country was at that time in a state of feverish excitement, and there were few who took a lively interest in anything but current events. Had the meeting been held, we doubt if a respectable number of our medical brethren would have been called together. But the condition of our civil affairs has changed, and this change gives a new tone to the feelings and temper of the people. Business is beginning to resume its former channels, and citizens are returning with increased interest to their former pursuits. The question which we now propose to the medical profession is this: Shall not the American Medical Association hold its annual meeting at Chicago, on the first Tuesday of June next?

So far from the present condition of the country constituting reasonable ground for further postponement, there are several reasons which render a meeting of the Association at this time particularly desirable. The civil contest into which we have been unexpectedly precipitated, develops many new subjects of interest and importance, which it behoves the profession to consider. A host of topics relating to military surgery and hygiene are now, for the first time in our generation, brought home to us, and their careful consideration devolves upon the profession.

There will be no dearth of topics which, in the present state of affairs, will spring up in the deliberations of the Association, and which no other organized body of the profession can so appropriately consider. We conceive that the Association owes a duty to the country, the profession, and to itself, which it can only discharge by holding a stated meeting, and remaining in session long enough to deliberate carefully on all the important matters which will come up for consideration. We know that we utter the sentiments of many, when we urge upon the officers of the Association to see to it that the regular meeting in June be seasonably announced.

In connexion with the meeting of the Association, we desire to allude to a matter which seems to us to claim more attention than it is receiving from the profession. The practitioners of Homœopathy are, at the present juncture, putting forth all their efforts to obtain some official or legal recognition of that system of practice. They are striving for this end with somewhat of the same desperate energy with which the rebellious states are seeking to be recognised by the great foreign powers. If it be said that these efforts show the weakness, rather than the strength, of the roving system which has for many years thriven on the credulity of a portion of society, we admit the fact; but, nevertheless, is it well for the profession to remain altogether apathetic? Do we not, by inaction, furnish occasion for misapprehension? Ought we not, as a profession, to do something towards enlightening our legislators, and, to say the least, not leave it to be inferred that we are wholly indifferent to the action which may be taken respecting the applications before our state and general governments?

As pertinent to these inquiries, we would refer to past experience of medical legislation in this state. Twenty-five years ago, the laws regulating the practice of medicine and surgery in the state of New York were admirably adapted to promote the welfare of the profession, and afford security to the public against imposition. It was requisite that every regular practitioner should become a member of the county society. The profession, thus, had the power to determine who should, and who should not, be ranked in the class of regular practitioners. Irregular practitioners were prohibited from practising, by fines, and by imprisonment, if they persisted after having been repeatedly fined. They had no power to collect bills for medical services. The class of empirics known as botanical practitioners, or Thomsonians, raised a hue-and-cry against these restrictive laws. By pertinacious clamor they procured a law authorizing them to practise, provided they prescribed only vegetable remedies, indigenous in this state! But this did not satisfy them; they continued to harass the public and the legislature, until not a few members of the profession, tired of hearing so much about the subject, themselves petitioned to have all the restrictive laws abrogated. The legislature finally granted to the botanics all they asked. This class of empirics was then pretty numerous, and, like the homœopathists of the present day, they had their active adherents. Where is the sect now? In this state it is almost extinct. The concessions which were obtained did not suffice to keep it in existence; perhaps, on the contrary, it suffered a positive injury when they could no longer complain of persecution. But these concessions also damaged the legal position of the profession. The profession were deprived of some of the prerogatives important for the protection of its character, and not less so for the welfare of the public. Now, the members of the profession in this state, had they been disposed, undoubtedly might have thwarted the efforts of the botanics, until the system died out from its intrinsic elements of decay.

This experience seems to us to teach a lesson with regard to the attitude of the profession towards homœopathy at the present time. We can prevent any recognition of this system, either by state legislature or the general government, if we choose to make an exertion for that end. There is no class of men in this country who can exert a stronger influence, by united action, for any important object, than the members of the medical profession; with union and action we can become irresistible. We can make and unmake legislators, governors, and legislatures, if we choose. We have only to organize and act in concert. It is, then, simply a question of propriety or policy, whether we shall, as a profession, take steps to put a quietus on the purposes for which the homœopathists are stirring, or whether we shall remain passive, and suffer then to effect what they can by their importunate demands.

We leave this question for the present with our readers, adding that, if it be desirable for the profession to consider the matter, and, still more, if it be concluded to act, it is advisable not to let the annual meeting of the Association have the go-by.

THE WEEK.

We have called the attention of the profession to the importance of some kind of arrangement on our railway thoroughfares to meet the severe accidents that so frequently befal passengers. We learn that a measure of this kind has been introduced into the Legislature of this State, and has been very favorably received. The following are the outlines of the Bill:—

"It provides for the Association of the Railroad Companies of the State, the same to be a 'body politic and corporate,' managed by a 'Board of Managers,' consisting of the Presidents or such other officers of the associated companies as may be designated by the respective companies and the President of the Association, who shall be a citizen of the State of New York, and not an officer of any railroad company. This association shall make up a guarantee fund of $100,000, chargeable upon each road pro rata as to its passenger traffic, and to enable the association of railroads to meet casualties the respective companies shall, in their discretion, be allowed to charge one-half of a mill per mile to every passenger in first class cars, or one cent for every twenty miles or distance within it in addition to the usual fare. In return for this, each passenger is guaranteed, in case of death, $5,000 to his heirs; in case of loss of a limb, or an incurable injury seriously interfering with usual occupations, $5,000; and for other injuries in proportion, to be hereafter definitely laid down. Surgical stations are also to be furnished along the line of the road, and competent surgeons appointed to attend them when required. This done, the railroad companies associating are to be exempted from all further liability on account of any accident to passengers. At the end of each year, whatever remains of the associated fund, after paying all expenses, shall be divided into two equal parts, the one to accumulate until a permanent fund of $100,000 is created, the other to be equally divided and paid to the trustees of four hospitals, two in the eastern and two in the western part of the State, they undertaking in return to treat gratuitously whatever cases of injury may be sent to them from the railroads. When the $100,000 fund is completed, then the

whole surplus will go to said hospitals. Thus, whatever is obtained from the public will be returned to the public. It might be urged that companies, by such a measure, would be relieved altogether from pecuniary liability, and might become careless. To obviate this, a sort of reward and penalty clause has been introduced. It provides that on an accident occurring on any road, the company shall be fined to the extent of one-third of the amount to which it has rendered the associated fund liable. This fine is to go into a special fund, which, at the end of the fiscal year, is to be divided pro rata as to their contributions to the casualty fund, first charging the respective companies to the extent of the one-third of the claim made by their road on the associate fund. Rewards and penalties are here set forth of the highest importance as securing care and proper equipment on every road of the association. Companies not meeting with any accidents will thus be absolute gainers; while those with whom they occur, not only lose the amount to which they are fiued, but have an equal amount deducted from them in their share of general distribution."

This is a matter which should especially interest all surgeons residing on railways. The movement has thus far been principally sustained by Dr. Arnold, of Yonkers, and we hope there will be a concerted action of all interested in this measure.

—

The daily papers announce the death of one of our most eminent statesmen, the Hon. Wm. Pennington of Newark, N. J., by accidental poisoning. It seems that he was suffering from fever and was attended by Dr. Parker of N. Y., and Dr. Pennington of Newark; he was ordered eight grains of quinine: the apothecary, by mistake, put up eight grains of morphine, which the patient took at a dose, and which quickly proved fatal. We are not surprised at this accident; indeed, it is more surprising, considering the want of system among druggists in the arrangement of poisons on their shelves, and the gross ignorance of their assistants, that these casualties are not of every-day occurrence. If such a fearful calamity should lead to reform it were not so lamentable, but it will teach a lesson which but one person will heed, and he is the unfortunate apothecary who committed the error.

—

A writer in the Boston *Medical Journal* endeavors to vindicate Dr. Morton in his late prosecution for the infringement of his ether patent. It is still asserted that he merely wished to test the validity of his patent in order to compel Government to compensate him. The same plea was alleged when he brought a suit against the U. S. Marine Hospital at Chelsea. Whatever were the motives, then and now, in bringing these suits, the impression left on the minds of those who listened to the arguments of his counsel in the present suit, is decidedly that this was the beginning of the arraignment of public institutions, if not of individuals, for infringing his patent. Dr. Parker was fully justified in saying that the movement in Dr. Morton's behalf in this city was, "on the idea that he had abandoned his patent, otherwise not a thing would have been done."

—

In the last English edition of Samuel Cooper's Surgical Dictionary, a singular error has been committed by Mr. Eriensen, the author of the article upon ligature of the Internal Iliac artery. It is stated that this artery was first tied, and that successfully, in 1828, in the United States, by "Mr. Hudson of New York." To be correct, it should have read, by "S. Pomroy White, M.D., of New York; formerly of Hudson, in the State of New York." As Dr. White performed this important operation at a distance from his residence, and attended the patient without receiving any pecuniary compensation, we think the credit of the operation should not be accorded to Mr. Hudson.

—

The influence of the war upon Medical Education remains an unsettled problem. There are many reasons why it should increase the number of students; such as the great demand for surgeons in the army and navy, and the vacancies which have occurred in country towns by the enlistment of older practitioners in the army. As yet, we have no reliable index of the changes which are to come. We may notice as facts which give no definite conclusion to this question—that the Castleton Medical College (Vt.) has given up its present Spring course, on account of our civil troubles, while the Medical College of Ohio is about to commence an Extra Regular Course, to meet the wants of the army.

—

We commence publishing in this number the official transactions of the N. Y. Pathological Society. No society is attended more profitably than this by the practitioner, for none is so devoted to the discussion of practical questions. These transactions are always of intcrest, and will now, we believe, prove doubly interesting under the supervision of the committee of publication, which is composed of the following members:—Drs. Clark, Krackowizer, Post, and Shrady.

Correspondence.

ENGLISH PHYSICIANS ON TYPHOID FEVER.

[To the Editor of the American Medical Times.]

Sir:—The death of Prince Albert, which, according to the London *Medical Times and Gazette*, was caused by typhoid fever, has given rise to a renewal of the discussion concerning the first recognition of this disease as a distinct affection from typhus fever. In questions of priority in medical discoveries, English physicians have more than once assumed the credit which belonged to American observers, and have sometimes even appeared to consider our claims as scarcely entitled to a candid examination.

In the Journal above referred to, Dec., 1861, p. 670, there is a communication from Dr. A. P. Stewart, containing the following words: "My investigations were made from 1836 to 1839, and were followed up by the publication of my conclusions, first at two meetings of the Parisian Medical Society, in April, 1840, and then in the *Edinburgh Medical and Surgical Journal* for October in the same year. What influence that paper may have had in the formation of medical opinion in Europe and America, on the subject now attracting such universal attention, during the nine years that elapsed before the appearance of Dr. Jenner's well known papers, I leave to the decision of others, who are probably better informed on this subject than myself."

That Dr. Stewart should assume his paper to have had any special influence, beyond that which it acquired as corroborating previous conclusions, is singular, inasmuch as two months before its presentation a memoir was read in the same society, by Dr. N. C. Barlow, which covers nearly the whole ground (*Lancet*, Feb. 29, 1840). But to neither of these gentlemen belongs the honor which one of them appears to attribute to himself. The distinctive peculiarities of typhus and typhoid fever were determined by Drs. Gerhard and Pennock, of Philadelphia, who published an account of them in the *American Journal of Medical Sciences*, for Feb. and Aug., 1837. These papers were republished in the *Dublin Journal of Medical Science*, Sept., 1837,

p. 148, etc., analysed in the *Medico-Chirurgical Review* for Oct., 1837, p. 553, and translated in *l'Expérience*, a Parisian Journal, in 1838. Consequently they must be presumed to have been well known to Dr. Stewart and all other physicians.

The writer of the present communication, having observed the typhus epidemic in the Blockley Hospital, described by the physicians just named, afterwards made a special study of typhoid fever in the wards of M. Louis, in Paris, and had opportunities of observing typhus, with Vulpes in Naples, Tweedie in London, Alison in Edinburgh, and Graves in Dublin. The results of these observations were contained in a paper, of which Valleix speaks as follows: "In an unpublished memoir of Dr. Stillé, and *interne* of Dr. Gerhard, during the prevalence of the epidemic of Philadelphia, which was read before the Medical Society of Observation (September 14 and 28, 1838), and which we have before us, the two diseases are compared, symptom by symptom, and lesion by lesion; and apart from the phenomena of fever, common to all febrile affections, the opposite of what is observed in the one is sure to be presented in the other." (*Archives Gén.*, Feb., 1839, p. 213.) M. Valleix concludes his essay with the following among other inferences: "English and American typhus is a different disease from typhoid fever." A few months later, the same physician published (*Archives Gén.*, Oct., 1839, pp. 129 and 265) an analysis of thirteen cases of typhus, observed in London by Dr. G. C. Shattuck, of Boston, which fully confirmed the conclusion just stated. A paper, founded on the same cases, was afterwards printed in this country, by Dr. Shattuck (*Phila. Med. Exam.*, Feb., 1840, p. 133). It was after the whole of these publications that Dr. Barlow and also Dr. Stewart communicated their observations to the Parisian Medical Society. The apparent want of candor in the paragraph which we have quoted from the *Times and Gazette*, is therefore, for its author's sake, very much to be regretted; the more so, indeed, as some of his own countrymen, Drs. Murchison and Jenner, for instance, have discussed the subject in a more generous spirit.

It argues but little for the sagacity of Englishmen, pursuing medical studies at Paris, that for so many years after the publication of Louis's work on typhoid fever, they should have remained blind to the striking differences between this affection and typhus, their ordinary endemic fever; singular that it should have been reserved for a foreigner, and he an American, to furnish the contemporary English medical profession with the first demonstration of their differences; and most singular that they should have persisted in their wilful blindness, although they possessed, in a work as old as Huxam's, a clear description of "slow nervous fever," on the one haud, and of "putrid malignant fever" upon the other. Whoever has observed the *vis inertiæ* opposed by some of their own countrymen to the recent demonstrations of Jenner, Murchison, and other enlightened pathologists, will feel no surprise that even now an article occasionally appears in their journals betraying a singular hankering after the old confusion and obscurity which reigned so long in English pyretology. A. S.

AN EXPLANATION.

[To the Editor of the American Medical Times.]

Sir:—I received a few days ago from Dr. Daniel H. Tuke, a reclamation relating to the memoir which appeared in the Medical Times, on Moral Insanity. Here follows the extract from the letter containing it. ". . . . . You will, I am sure, allow me to correct an error into which you have fallen; I do share Ray's and Hoffbauer's opinions most heartily, and *quoted them because I approved of them.* By 'unqualified'* I mean simply that Hoffbauer's judgment was so decided that he does not qualify his statement by any exception or doubt. I never supposed the word would be understood in an unfavorable sense. I conclude you supposed I intended to convey the idea of *unjustifiable* assertion. Had I read your remarks a few weeks earlier, I should have been able to make the statement clearer, as the second edition was passing through the press; now, however, I must wait till another edition (should it ever be called for), when I will make use of an expression which cannot be misunderstood. Should you have an opportunity of explaining this misapprehension among your medical friends, I should be obliged. . . . . "

Now, dear Sir, I most readily acknowledge my error, since my honorable correspondent has explained the sense of that word; before that, puzzled to understand its signification in Dr. Tuke's sentence, I had recourse to Todd's and Johnson's Dictionary, and found that it meant "not fit: divested of qualification." How could I, unaware of the new sense, find that it might signify just the reverse of what Dr. Johnson says, namely,—not wanting any qualification. If it is my own fault, by inaccurate knowledge of the English, with which I hope to become more familiar, I find my excuse in saying, that in such an important work as the *Manual of Psychological Medicine*, which I consider as a standard work, not too much care can be taken in its close examination. Yours, etc.,

I. Parigot, M.D.

Sing Sing, February 10, 1862.

* Page 179 of the *Manual of Psychological Medicine*, by J. C. Bucknill and D. H. Tuke. London: 1858.

VETERINARY SURGEONS IN THE ARMY.

[To the Editor of the American Medical Times.]

Sir:—It has occurred to me, in connexion with the army, that perhaps a few remarks on the subject of Veterinary Surgeons might be of use to some of the numerous readers of your valuable journal. I have for many years been impressed with the idea that this country is peculiarly fitted for the development of that arm of the military service called cavalry. The extent of surface to be protected by an army, the varied uses that this branch of the service can be put to, together with the absolute necessity that there exists in civil life for the cultivation and development of the noble animal, the horse; these are some of the considerations which have long induced me to feel an interest in the care and protection of this animal. It is well known that the governments of Europe (England, France, and Germany especially) pay particular attention by legal enactments and public contributions to these subjects. Rome, it is said, although long desiring it, did not succeed in conquering Carthage until she had acquired a superiority over the latter in cavalry. It will be remembered also, that the horse is a very delicately constituted animal, and in his higher developments demands almost as much care and protection from the elements as man himself.

The cavalry arm of the service has, until lately, it seems, not been a favorite arm with our generals. The present rebellion has developed more forcibly than ever before the absolute necessity of a large cavalry force.

I have watched with some degree of interest (having been connected with the cavalry in the army), the character, wants, and advantages of this military power. The first thing which has attracted my attention is the want of size in the American horse. As seen in the volunteer service he is deficient in breadth of beam; in other words, he lacks bone and muscle. He is better calculated for speed and light service than for the heavy drudgery of the dragoon or cavalry duty, and especially for artillery service. Of course the strongest and best horse found among us is the Morgan horse, and the best animals for the service doubtless come from this stock; but a large percentage of our horses, are Messenger, and similar breeds, which combine grace with speed, without a great deal of strength. The splendid cavalry horses found among the Guards of the thrones of England, France, Germany, and Russia, are doubtless the result of long and intelligent training and breeding sustained by bountiful governmental patronage. Napoleon seemed to be fully alive to the importance of this subject, and his Harras remain to this day scattered

through France, in testimony of his wisdom and foresight. This is my first observation in reference to my subject.

My second course of remarks has reference to the condition of our horses when first brought into the army, and for some time afterwards. These horses are generally young, some of them not fully grown, and are in good order. Many of them have not had the ordinary colt's disease, the distemper, or any of the common affections of the youthful horse. The consequence is, that when brought in contact with so many others, these soon contract the distemper, and require immediately proper care and attention to carry them safely through the disease. I have seen young horses, otherwise well organized, with good points, absolutely rot, exposed to the weather, without proper feed or any medical attention in this disease. I have often seen large sloughs under the jaws and about the neck wasting the strength of the horse, merely for the want of opening the abscesses when formed. I have seen curable cases of glanders allowed to run on to a fatal termination without care or attention. I have seen slight injuries of the fetlocks and other joints allowed to continue until very valuable horses were perfectly worthless. I have seen chronic ophthalmiæ drag on from week to week, and month to month, ultimately producing blindness, which might have been easily cured by timely medical attention; and finally, I have seen horses by the hundred, suffer from colds, bowel affections, and starvation, for the want of a very little care at the proper time and in the proper direction. These horses cost the government one hundred and twenty-five dollars apiece. The loss therefore of but few of them would pay an ample salary to a well educated veterinary surgeon to every regiment in the service. I am convinced that the government would have saved in the single regiment to which I have been attached, in the five or six months of its existence, at least four times the annual salary of a good veterinary surgeon, if such an officer had been attached to it. The veterinary officers are denominated by the "Regulations," farriers, one of whom is assigned to each company in a regiment. From personal observation I should say positively that these farriers are totally incompetent to the duties of taking care of the health of the horse. This is so obvious to some of the commanders that the presumptuous pretenders are unceremoniously dismissed from the service by them. A good veterinary surgeon, well educated, in each regiment, with power to nominate his assistants in each company, is, in my opinion, an absolute necessity. The efficiency and reliability of this arm of the service demand it. Economy in public expenditure demands it; and common humanity for the welfare of this noble but much abused servant of man, cries aloud for at least this much protection against the ignorance and brutalities of charlatans and pretenders to veterinary science. You see, Mr. Editor, that I have reached my subject at last, and I must say that I cannot explain the unaccountable apathy exhibited by both the government and the people on this subject. Pennsylvania led the way in giving a charter for a veterinary college some seven years ago. Massachusetts, Ohio, and New York have followed her example, and have chartered similar institutions. The general government had perhaps better take it up itself, and establish a college in Washington for the education of veterinary surgeons. Be this as it may, if the proper laws were passed, like those of Europe, recognizing and properly encouraging such a body of men as veterinary surgeons, they would soon come into existence. I have been informed from reliable authority that ten per cent. of the live stock of this great agricultural country is annually lost to its owners for want of proper medical attention and advice. This is not the time or place to examine the bearings of this question in each relation to the other interests of the community, but it is a well established fact among those who have examined the matter, that nothing of equal importance to our country has been so much neglected as this. Veterinary science, as I may add, from known facts, that the faculty, for its cultivation are almost unlimited. In reference to the army itself, the government should look after not only the ordinary causes of diseases and loss, but the proper training of its cavalry.

Respectfully yours,

James Bryan,
Late Surgeon to "Cameron Dragoons," Pa. Vols.

RICHARDSON'S BRIGADE MEDICAL CLUB.

Head Quarters, 87th N. Y. L. Richardson's Brigade,
Camp Michigan, near Alexandria, Va.

[To the Editor of the American Medical Times.]

Sir:—I am happy to be able to inform you that the medical officers of this brigade have organized a Medical Club, for the purpose of discussing interesting subjects connected especially with military hygiene and surgery.

The society has already existed for more than a month, and meets once a week, in rotation, at the quarters of the regimental surgeons; the discussions are carried on conversationally, the only formality observed being the appointment of a chairman at each meeting, the secretary being permanent. A social reunion closes the proceedings of the evening. The constitution, which is very simple, admits to membership, first, the surgeons and assistant surgeons of the brigade, ex officio; and second, graduates or students connected with the hospitals or ambulances. The subjects already under discussion have been: The position of the medical staff and their attendants, ambulances, etc., during engagements; their duties at the same time; primary or secondary amputations; conservative surgery, including resections, etc., etc. In addition to the value of such discussions, another advantage to be derived from frequent intercourse is the greater degree of intimacy which ought to exist between medical men, who are to act in concert during the trying ordeal of a murderous conflict, and the knowledge of individual characters, their excellences and peculiarities, so necessary to brigade surgeons and medical directors, who would be otherwise ignorant of the *strong points* of those under their command. To Dr. D. W. Bliss, our brigade surgeon, we are indebted for this useful combination of the medical men of the brigade. It remains with ourselves to profit by its manifest advantages.

ABSTRACT OF QUARTERLY REPORT OF SICK AND WOUNDED FOR THE QUARTER ENDING DEC. 31, 1851.

Fevers.—Febris continua communis 21, intermittens quotidiana 34, intermittens tertiana 3, remittens 6, typhoides 19; death 1, in general hospital. Ephemeral cases of this class, mixed and undetermined, 96. Total 179, death 1.

Diseases of the Organs connected with the Digestive System.—Colica 4, constipatio 116, diarrhœa acuta 140, dysenteria acuta 15 (very mild and differing little from diarrhœa), dysenteria chronica 1, gastritis (subacute) 3, gastro-enteritis 1; death 1, in general hospital. Tonsillitis 2. All other diseases of this class 8. Total 290, death 1.

Diseases of the Respiratory System.—Bronchitis acuta 41, Catarrhus 156, laryngitis 1, phthisis pulmonalis 3 (discharged), pleuritis 2, pneumonia 2, other diseases of this class 24. Total 229.

Brain and Nervous System.—Neuralgia (miasmatic) 10, tic douloureux 2. Total 12.

Urinary and Genital Organs and Venereal Affections.—Bubo syphiliticum 2, orchitis (from contusion) 1, gonorrhœa 1, syphilis primitiva 2, syphilis consecutiva 1. Total 7.

Fibrous and Muscular Structures.—Lumbago 3, rheumatismus acutus (muscular) 13, other diseases of this class 1. Total 17.

Abscesses and Ulcers.—Abscessus (trifling) 4, fistula in ano (cured by operation) 1, paronychia 1, phlegmon 2, ulcus (trifling) 5, other diseases of this class 6. Total 19.

Wounds and Injuries.—Ambustio 1, contusio 1, hernia 2 (1 discharged, the other ordered "to wait for further orders with his regiment." He is, however, in constant danger, as I have no proper trusses to meet his case, those I have

being all of one size, and so large as to be utterly unfit for ordinary mortals); sublunatio 22, vulnus incisum 3, vulnus contusum vel laceratum 4, vulnus sclopeticum 1, other diseases of this class 1. Total 37.

Diseases of the Eye.—Conjunctivitis 2, other diseases of this class 7. Total 9.

All other Diseases. Debilitas 18, ebrietas 2, hæmorrhois (mild cases) 5, prolapsus ani and hæmorrhois 1 (discharged), morbi cutis 12, odontalgia 6, scrofula 1, morbi varii 6. Total 51.

Total taken sick during quarter 851, deaths 2.

General Observations.—First, with respect to fevers. These were generally simple continued fevers, owing to functional derangements consequent on exposure and indiscretion. Occasionally, in weak or scrofulous subjects, they assumed a typhoid character, but of genuine typhoid (enteric) fever, such as I have been accustomed to see in the New York hospitals, I have not had a single case in my regimental hospital. Two patients, sent to the general hospital, were said to have died of typhoid fever, but one, I know, had gastro-enteritis in camp from over free indulgence. He was also reported to have had diphtheria, and died, no doubt, with typhoid symptoms. The treatment consisted of nourishment and stimulants. The most numerous and obstinate diseases of this class were miasmatic, owing to the unhealthy location of one or two of our camps, especially near Fort Albany, within sight, smell, and taste of all the pestiferous exhalations emanating from the swamps and *slaughter houses* on the Virginia side of the Potamac, extending from the Long Bridge to Alexandria. But a barrel of quinine bitters received from the Sanitary Association kept the regiment on its legs, and brought down the sick list from seventy to twenty-five in a few days, at a time, too, when the poison assumes its deadliest malignity. Here quinine and whiskey were not only the cure, but the prophylactic; emetics and cathartics were generally used in the commencement of treatment.

With regard to the prophylactic powers of quinine, which I have heard some to doubt and even deny, I must say that I am firmly convinced of its great power as such, having had the most unmistakable evidence of the fact, after extensive use and trial, not only at the time above alluded to, but on other occasions, when the regiment was exposed to miasma. My experience may be summed up briefly thus: It cures almost all miasmatic diseases; it renders mild, and in a great measure abortive, what would be otherwise a determined case of miasma; it prevents miasma, when used as a prophylactic.

So far, I have not seen a genuine case of articular rheumatism; in fact, I have seen nothing appertaining to it but local muscular pains, produced by exposure to damp, while the soldier lay fatigued on the ground.

A case of fistula in ano was cured permanently by operation, the patient reporting himself for duty in a few weeks.

A case of incipient hernia was treated by rest and counter-irritation of the inguinal canal externally, which produced adhesive inflammation there in the most effectual manner.

The average mean strength of the regiment for the quarter was 732, which includes only eight companies, two others being detailed for duty at Fort Washington, Md. It is mainly composed of Irishmen, generally mechanics, clerks, farmers' help, and other laborers. There are about 500 in the regiment whom I have rarely or never seen on the sick list, except when we had them vaccinated at the Battery, New York.

Since the regiment came into service, it has been mainly engaged in the hardest duty, such as picket duty and working on the forts in the neighborhood of Washington. In this way we have had a "hand in" building Forts Albany, Richardson, Erin (on Munson's Hill), Lyon, etc., while our pickets were "bustling" up the enemy on the outposts.

WILLIAM O'MEAGHER, *Surgeon.*

January 21, 1862.

FOREIGN MEDICAL NOTES.

THE great theme now in Paris is ventilation, and as there is no one question in our science more settled than that pure air is essential in both health and disease, it is strange indeed that the subject has been so much overlooked. And, besides being poorly ventilated, the hospitals are but scantily lighted. The Lariboisière and some others of the newest may be exempted from this fault, but in all the lower wards of hospitals in the "Quartier Latin" the patients are seen through a dingy twilight. "*Lumière si vous plait*" is a common cry from the professor, and up comes the attendant with a tallow candle in his hand (10 A.M.), to throw light perhaps on a case of hospital gangrene! The majority of the professors are, it would seem to me, in favor of this lack of light and air, as their amphitheatres, for instance, can be readily ventilated if they so choose; but no, such are generally as foul as lager-bier saloons in the basement. And as those students who are indigenous appear to relish it quite as well as the professors, all that we foreigners can do is to set it down as *un trait français*, and be resigned. The people in general seem much more fearful of "taking cold" than we do, for every second man in the street has his chin in a comforter, and Malgaigne invariably sits down to lecture wrapped up as though on a snow-bank. On the other hand, during summer weather every one is out of doors as much as Indians are, and almost as sparsely dressed. They seem fond of the two extremes of air to live in—the very putrid or the very pure—the former being met with in the *cafés*, and the latter in the *jardins*, which, as everybody knows, are the two popular resorts of Parisians.

But, bad as the hospitals are at present, they will compare charmingly with what they were. The following extract I take from an ancient report which has fallen into my hands, on the condition of the Hôtel Dieu. It was drawn up before the revolution of '89, and in order not to deprive it wholly of its quaintness in style, I will translate word for word as far as possible:—

"They (committee) have, remarked four, five, and nine sick in one bed They have seen the dead huddled with the living; wards where the passages are narrow, where the air stagnates charged with humid vapors, and where the light penetrates but feebly. The commissioners have seen also the convalescent in the same wards with the sick, the dying put with the dead, and many forced to get naked from bed to the window, winter as in summer, to breathe the exterior air in bridge St. Charles. They have seen for the convalescent a ward in the third story, to which the approach is made by traversing the ward for those taken in small-pox; the ward of the maniacs contiguous to that of the unfortunates who have suffered the most cruel operations, and who cannot hope for repose in the neighborhood of these madmen, whose frenzied cries are heard day and night; in the same ward the contagious maladies with those that are not; women attacked with small-pox put in with those having fevers. The apartment where they trepan, cut for stone, and amputate members, contains equally those being operated upon, those that are to be operated upon, and those that have been already. The operations are made in the middle of the room even, where the patients can well see the horrible preparations, and hear the cries of torment; those whose turn it is the day following, have before them a *tableau* of their future sufferings, and those who have already passed this terrible ordeal, judge how profoundly they ought to be shocked by these cries of pain! These terrors, these emotions are received in the midst of accidents from inflammation or suppuration (*au milieu des accidents de l'inflammation ou de la suppuration*) to the prejudice of recovery and hazard of life. La Salle St. Joseph is consecrated to women *enceintes*, and married or unmarried, sound or diseased, they are there *tout s ensemble*, three or four in this state lying in the same bed, exposed to sleeplessness, to the contagion of tainted bedfellows, and in danger of injuring their infants. The

women *accouchés* are placed four or more in one bed at different epochs of their delivery. The heart grieves at the bare idea of this situation where the poor women mutually infect, and the most part perish or leave languishing. A thousand causes particular and accidental unite each day with causes general and constant of a corrupt air, and force to the conclusion that Hôtel Dieu is the most unhealthy and the most inconvenient of all the hospitals, and that two die out of nine."

No improvements were begun in this hospital till the beginning of this century; but its position must debar it from ever ranking higher, or worthy of further expenditures. The average number of deaths now is one in seven, thus showing considerable amelioration.

M. Davenne, in the Academy of Medicine, accepts the statistics of Malgaigne, which show that the proportion of deaths in ratio with the number operated on surpasses greatly that of the London hospitals; but, while admitting this, M. Davenne is persuaded that as much blame should be attached to *after treatment* as to the bad condition of the hospitals. Better not exculpate the hospitals, M. Davenne, better confess to bad buildings than bad treatment.

M. Renault, Professor of Hippopathology, furnished some interesting facts in support of fresh air for animals. He stated that the Veterinary Hospital at Alfort, previous to 1828, was so miserably ventilated that every operation, even to bleeding, became complicated with accidents of gravity, and for a horse to enter was almost certain death. Since this epoch the buildings have been reconstructed with a view to aeration, and to cure is now the rule. The *infection purulente*, formerly so common, is now extremely rare, especially since it has become the practice to do the dressings by the light of day.

It appears that Professor Traube, of Berlin, has found in another case of aneurism in the aortic arch, by means of the laryngoscope, the condition of the larynx as follows:—Moderate congestion of mucous membrane of epiglottis, of arytenoid cartilages, and of the vocal cords. The glottis larger than normal. On the patient pronouncing the letter *e*, the left vocal cord rested immovable, while that on the right approached slower to the median line than natural. Movements of arytenoid cartilages similarly modified. Besides, the glottis did not sensibly enlarge during deep respiration. CYGNET.

January 15, 1862.

Medical News.

SANFORD HALL, FLUSHING, LONG ISLAND, N. Y.—Since the recent death of Allan Macdonald, Esq., one of the proprietors of this Establishment, the following brief statement to its patrons and friends, of its present condition and prospects, has been made. The seventeen years of prosperity and usefulness which the Institution has enjoyed under the direct control of its founder, Dr. James Macdonald, and, since his death, under that of his brother, the late Mr. Allan Macdonald, furnish the best proof that the original plan of the Establishment was wise in its conception, and has been prosecuted with fidelity and success. This plan, it need hardly be added, it is the aim of the proprietors to pursue and to perfect. Mrs. Dr. Macdonald will remain personally identified with the Institution, as the representative of the interests and the aims of her honored husband. Dr. J. W. Barstow, having removed his family to the Hall, will continue, as heretofore, the Resident Physician. Dr. Benjamin Ogden of New York, whose long experience in the treatment of mental disease is well known, will also retain his connexion with the Institution, as Consulting Physician; visiting the patients regularly twice every week, or more frequently if desired. It is believed that under the personal superintendence above indicated, the management of the Institution will continue acceptable, and that the advantages which it has hitherto offered for the relief and treatment of the diseased mind, will be in all respects undiminished.

SOCIETY OF ARMY SURGEONS AT BALTIMORE.—The Surgeons of this Division convened at the office of the Medical Director of the City of Baltimore, on Wednesday the 12th instant, and proceeded to organize a Society for Improvement in Military Surgery. Surgeon Simpson, of the Regular Army, was called to the chair, and Assistant Surgeon C. C. Lee appointed Secretary. On motion, Surgeons Gilbert, Cox, Read, Gilman, and Taylor, were appointed a committee to draft rules for the regulation of the body, and also to nominate permanent officers for the same. The committee reported the following gentlemen as officers of the Society: For President, Jacob Simpson, United States Army; Vice-President, Brigade Surgeon John McNulty, United States Army; for Secretary, Robert Bartholow, Assistant Surgeon, United States Army. On motion of Brigade-Surgeon Cox, it was resolved that members of the medical corps on duty out of Baltimore, either in this or other divisions, be cordially invited to a participation in the deliberations of the Society, whenever their convenience may allow. On motion the Society was ordered to meet every Wednesday, at the office of the Medical Director of the Division, at 3 P.M. On motion the proceedings were ordered to be published in the city papers.

DEATH OF DR. LUTHER V. BELL.—We regret to hear the death of Dr. Bell, late a Brigade Surgeon in Gen. Hooker's division. Dr. Bell has long occupied a prominent position among the students of Psychological Medicine in this county. He was for many years the Resident Physician of the McLean Asylum, Mass., and at one time the President of the Association of Physicians of Lunatic Asylums. He was also an author of considerable celebrity. On the breaking out of the rebellion he joined a Massachusetts regiment as surgeon, was at the battle of Bull Run, and subsequently received the appointment of Brigade Surgeon.

PARALYSIS FROM THE VIPER'S BITE.—Dr. Guyon has sent in an interesting communication on the effects of the sting of a horned viper (Cerastes Ægyptiacus), on an Arab of the oasis of Laghouat, one hundred and twenty leagues south of Algiers. After the lapse of a month, during which the wound had healed, the patient was attacked with paralysis on the side opposite that where the sting had been inflicted. The author quotes several instances of this curious fact of paralysis ensuing after the bite of a reptile, and on the side opposite to that which had received the wound.—*Lancet.*

DROWNING AND SUICIDE.—Since July, 1861, the number of cases which have come under the cognizance of the Royal Humane Society, in which the lives of one or more persons were imperilled, was 146; of these 128 persons were successfully treated, but 18 were beyond recovery. There had been 13 cases of attempted suicide. The number of Hyde-Park cases had been 19, of which 17 had been successfully treated by the officers of the Society, but 2 were found drowned. The number of cases of attempted suicide was 4.—*Lancet.*

MODEL REGISTRATION.—In the town of Bridgeport, Ct., the annual mortality for 1861 is reported as 257; 62 of the deaths (more than one-fourth of the whole) are registered under the head of "*unknown causes.*" It is proper to state that the Registrar is not a medical officer, and also that the various cemeteries are not under the control of the municipal authorities.

ROYAL FREE HOSPITAL.—The Corporation of the City of London have voted the sum of two hundred guineas as a donation to the funds of this hospital.—*Lancet.*

DR. LALLEMAND, Professor of the Military Hospital of Val-de-Grâce, well known as the author of several scientific works, is appointed Chief Physician to the Army about to proceed to Mexico.—*Lancet.*

DR. GEO. C. BLACKMAN, of Cincinnati, resigned his position as Brigade Surgeon early in January, in order to attend to college duties.

ERRATUM.—In the third line of last paragraph of Dr. Horr's paper in the No. for Feb. 8, the word "*report*" occurs, where the word "*repeat*" was written.

PUBLICATIONS RECEIVED.

Notes on the Surgery of the War of the Crimea, with Remarks on Gunshot Wounds. By George H. B. Macleod, M.D., F.R.C.S. Philadelphia: J. B. Lippincott & Co., 1862.

Commentaries on the Surgery of the War in Portugal, Spain, France, and the Netherlands. By G. J. Guthrie, F.R.S. Sixth edition. Philadelphia: J. B. Lippincott & Co., 1862.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 10th day of February to the 17th day of February, 1862.

Deaths.—Men, 84; women, 101; boys, 110; girls, 108—total, 403. Adults, 185; children, 218; males, 194; females, 209; colored, 12. Infants under two years of age, 133. Children reported of native parents, 23; foreign, 159.

Among the causes of death we notice:—Apoplexy, 15; Infantile convulsions, 26; croup, 8; diphtheria, 11; scarlet fever, 28; typhus and typhoid fevers, 8; cholera infantum, 0; cholera morbus, 0; consumption, 73; small-pox, 11; dropsy of head, 19; infantile marasmus, 16; diarrhœa and dysentery, 5; inflammation of brain, 7; of bowels, 10; of lungs, 15; bronchitis, 3; congestion of brain, 9; of lungs, 0; erysipelas, 5; whooping cough, 4; measles, 5. 216 deaths occurred from acute disease, and 29 from violent causes. 280 were native, and 123 foreign; of whom 75 came from Ireland; 4 died in the Immigrant Institution, and 42 in the City Charities; of whom 16 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Feb. 1862	Barometer. Mean height	Barometer. Daily range.	Temperature. Mean	Temperature. Min.	Temperature. Max.	Difference of dry and wet bulb. Thrm. Mean	Difference of dry and wet bulb. Thrm. Max.	Wind.	Mean amount of cloud.	Humidity. Saturation, 1000
	In.	In	°	°	°	°	°			
9th.	30.00	.10	28	21	35	5	9	W.	2	681
10th.	30.10	.11	22	15	30	6	9	N.W.	.07	500
11th.	29.77	.20	32	22	40	4	6	N.	5	799
12th.	29.78	.11	38	33	43	6	9	W.	.06	661
13th.	29.96	.21	35	30	40	6	9	W.	4	650
14th.	29.85	.17	34	27	42	5	8	W.	7	670
15th.	29.99	.07	28	18	25	3	4.5	N.E.	9.5	770

REMARKS.—9th. Variable sky A.M. 10th, Wind fresh; very light snow, evening. 11th, Cloudy P.M. 12th and 13th, Very mild, and clear weather. 14th, Fog A.M. with very light rain; cloudy A.M.; variable P.M. 15th, A snow storm commenced at noon, lasting six hours; three inches on a level; melted 0·17 inch.

MEDICAL DIARY OF THE WEEK.

Monday, Feb. 24.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Thomas, half-past 1 P.M.
- Eye Infirmary, 12 M.

Tuesday, Feb. 25.
- New York Hospital, Dr. Parker, half-past 1 P.M.
- Bellevue Hospital, Dr. Loomis, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Wednesday, Feb. 26.
- New York Hospital, Dr. Cock, half-past 1 P.M.
- Bellevue Hospital, Dr. Sayre, Is. Hos., half-past 1 P.M.
- Eye Infirmary, 12 M.
- Pathological Society, half-past 7 P.M.

Thursday, Feb. 27.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Taylor, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Friday, Feb. 28.
- New York Hospital, Dr. Parker, half-past 1 P.M.
- Bellevue Hospital, Dr. Flint, half-past 1 P.M.
- Eye Infirmary, 12 M. Dr. Noyes's Lecture, half-past 1 P.M.
- Surgical Section, Dr. Wood's, 2 Irving Pl.

Saturday, March 1.
- New York Hospital, Dr. Cock, half-past 1 P.M.
- Bellevue Hospital, Dr. Wood's Clinic, 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICE.

SURGICAL SECTION.—*This Section will meet next Friday evening, at the house of the Chairman, Dr. James R. Wood: Subject,* TRACHEOTOMY, &c.

To Physicians.—Jerome C. Smith, M.D., late of McLean Asylum, near Boston, is prepared to receive into his house, 107 East 39th St., a limited number of Epileptics or Nervous Invalids for care and treatment. He can give them superior accommodations, and command the services of the most approved nurses.

References.—D. Tilden Brown, M.D., Supt. Bloomingdale Asylum, Manhattanville, N. Y. Edward R. Chapin, M.D., Supt., Kings Co. Lunatic Asylum, Flatbush, L. I. Moses H. Ranney, M.D., Supt. N. Y. City Lunatic Asylum, Blackwell's Island. John E. Tyler, M.D., Supt. McLean Asylum, Somerville, Mass. Rev. Wm. Adams, D.D., No. 8 East 24th St.

To Physicians.—Timolat's Old Established SULPHUR AND VAPOR BATHS. Introduced in 1820 by L. J. TIMOLAT, from Paris, at No. 1 Carroll Place, Bleecker street, corner of Lanrens street, New York. Given daily by A. L. TIMOLAT & CO.

Rensselaer Polytechnic Institute, Troy, N. Y.—The seventy-sixth semi-annual session of this Institution for instruction in the Mathematical, Physical, and Natural Sciences, will commence Feb. 19th, 1862. A full course in Military Science is now in progress.

Further information, with the Annual Register, can be obtained of PROF. CHARLES DROWNE, Director.

Sent Free by Mail on Receipt of Price.

A Practical Treatise on Military Surgery. By FRANK HASTINGS HAMILTON, M.D., author of a Treatise on Fractures and Dislocations, Surgeon-in-Chief to the Long Island College Hospital, Surgeon to the Bellevue Hospital, New York, Professor of Military Surgery and of Diseases and Accidents incident to Bones, in the Bellevue Hospital College. 8vo. Price, $2 00.

This work embraces a consideration of the Examination of Recruits, the Hygiene of Troops, relating to Diet, Dress, Exercise, &c.; Accommodation of Troops in Tents, Huts, Barracks, &c.; the Construction and Location of Hospitals; Preparations for the Field; Flying Ambulances, Litters, &c., also, Gunshot Wounds, Amputations, Hospital Gangrene, Senvy, &c. United States Army Regulations, with many other matters pertaining to Military Surgery.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

On Diphtheria. By Edward Headlam GREENHOW. 1861. Pp. 160. Price, $1.25.

Our readers will find a very large amount of information in the twelve chapters of which the volume is made up. Perhaps, in the present state of our knowledge on the subject of this obscurely understood disease, little more can be said beyond what may here be found written down.—*London Medical Times and Gazette.*

We have only been able here to refer to certain of the more prominent facts concerning diphtheria: but we believe we have said enough to recommend this well-written treatise to the attention of the profession.—*British Medical Journal.*

BAILLIERE BROTHERS, 440 Broadway.

Sent Free by Mail on Receipt of Price.

Text-Book on General Physiology FOR THE USE OF SCHOOLS.

A KNOWLEDGE OF LIVING THINGS WITH THE LAWS OF THEIR EXISTENCE. By A. N. BELL, A.M., M.D. One handsome volume of 318 pages, 12mo., illustrated by sixty wood engravings and two colored plates. PRICE ONE DOLLAR.

N.B.—The work was originally published at $1.50. It is *reduced in price* so that it may compete more favorably with other Text-Books.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Ten Lectures Introductory to the Study of Fever, by A. Anderson, M.D. Post 8vo. London, 1861. $1.55.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Essays and Observations on Natural HISTORY, ANATOMY, PHYSIOLOGY, PSYCHOLOGY, AND GEOLOGY, by John Hunter, F.R.S.; being his Posthumous Papers on those subjects, arranged and revised, with notes: to which are added the introductory Lectures on the Hunterian Collection of Fossil Remains, delivered in the Theatre of the Royal College of Surgeons. By Richard Owen, F.R.S., D.C.L. 2 vols. 8vo. London, 1861. Price, $10.00.

BAILLIERE BROTHERS, 440 Broadway.

Sent Free by Mail on Receipt of Price.

Traite d'Anatomie Pathologique Generale. Tome 4 in 8vo. Paris, 1861. $2.35.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

A Manual of Etherization: Containing Directions for the employment of Ether, Chloroform, and other Anæsthetic Agents by Inhalation in Surgical Operations, intended for Military and Naval Surgeons, and all who may be exposed to surgical operations; with Instructions for the Preparation of Ether and Chloroform, and for testing them for impurities; comprising also a brief history of the Discovery of Anæsthesia. By CHAS. T. JACKSON, M.D., F.G.S.F. 12mo. Boston, 1861. 75 cents.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

A Book about Doctors, by J. Cordy Jeaffreson. 2 vols. 8vo. London, 1861. $6.50.

BAILLIERE BROTHERS, 440 Broadway N. Y.

TO THE MEDICAL PROFESSION.

HAVING devoted my time and attention to the treatment of

SPINAL DISEASES,

for the last six years, examining closely the results that have followed, I am now prepared to show that a cure in

POTT'S DISEASE OF THE SPINE,

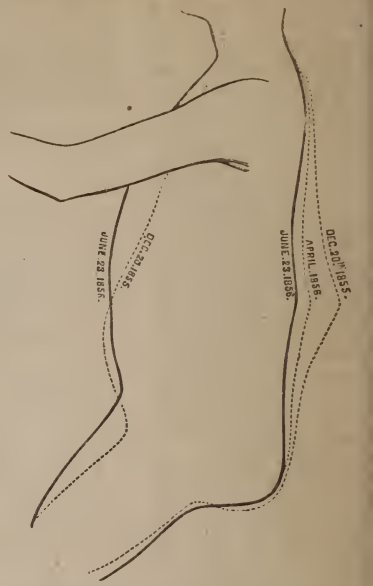
may not, in all cases, NECESSARILY consist of CURVATURE, as is generally maintained; but, that the further progress of the curvature may generally be arrested from the time treatment commenced, and, in recent cases, a cure effected, with the curvature nearly or quite removed by appropriate mechanical appliances and the internal use of medicinal agents, to the entire exclusion of setons, issues, or any other counter-irritant, or even recumbent position.

The accompanying cut represents the outlines of a case, at different periods, under treatment. I was called to attend in December, 1855.

Boy, nine years old, son of Dr. ——, New Bedford, Mass. Scrofulous diathesis; lower extremities powerless, and form much emaciated. The pain was severe, and the patient greatly prostrated.

Treatment.—Efficient support to the spinal-column. Galvanism, applied by friction, and douche.

Relief from pain, on the application of the apparatus, was immediate and complete, and the recovery rapid. The slight deformity existing when the last outline was taken has since *entirely* disappeared.



"Having examined the SERPENTINE SPRING APPARATUS, used by Dr. J. A. WOOD, in the treatment of Curvatures of the Spine, we recommend it as efficient and comfortable to the patient.

"HENRY J. BIGELOW, M.D., Professor of Surgery, Harvard University.
"GEO. HAYWARD, M.D., Ex-Professor of Surgery, Harvard University.
"WINSLOW LEWIS, M.D., Boston, Mass.
"J. V. C. SMITH, M.D., Boston, Mass.
"JOHN W. WARREN, M.D., Boston, Mass."

REFERENCE.

WILLARD PARKER, M.D., Professor of Surgery, College of Physicians and Surgeons, New York.
JOHN T. METCALFE, M.D., Professor of Institutes and Practice of Medicine, University of New York.
STEPHEN SMITH, M.D., Professor of the Principles of Surgery, in the Bellevue Hospital Medical College.
GEORGE MARVIN, M.D., Brooklyn, N. Y.
H. I. BOWDITCH, M.D., Boston, Mass., Professor of Clinical Med.
SAMUEL THAYER, JR., M.D., Professor of Anatomy in the University of Vt.
JAS. H. CROMBIE, M.D., Derry, N. H.

It is not expected nor even *desired* that Physicians who refer their patients to Dr. Wood, should give up the management of their cases, *except* so far as relates to the *mechanical* part of the treatment.

J. A. WOOD, M.D.,
No. 31 *Cooper Institute, N. Y.*

Mason's Sponge Tents and Compressed Sponge

have been in use for the past three years by many of the leading physicians of New York, and are pronounced far superior to, while the price is considerably below that of the imported.

For sale in boxes of one dozen assorted sizes, or singly, by the Manufacturer at 251 Eighth Avenue, N. Y.; Schiedlin Brothers & Co., 170 William street; Tiemann & Co., 63 Chatham street; Otto & Reynders, 58 Chatham street; Wade & Ford, 75 Fulton street; Caswell, Mack & Co., Fifth Avenue Hotel.

MANUFACTURED BY

A. MASON, DISPENSING CHEMIST,
251 Eighth Avenue, cor. Twenty-third st., N. Y.

Dr. Squibb's preparations invariably used, and every possible attention given to the Dispensing Department. Tresses, Elastic Stockings, Female Supporters, Shoulder Braces, etc.

Pharmaceutical Granules and Dragees (*Sugar-Coated Pills*)—of

GARNIER LAMOUREUX & CO.,

Members of the College of Pharmacy, Paris.

ALL THE PILLS OF THE U. S. PHARMACOPŒIA.
ALL PREPARATIONS OF IRON, QUININE, SANTONINE, ETC.
ALL THE COMBINATIONS OF COPAIBA, CUBEBS, ETC.
ALL THE ALKALOIDS IN GRANULES OF 1-5 TO 1-50 OF A GR.

These Pills are all covered with a coating of sugar, and present great advantages in the question of point of view, of the exactness of the weight of the medicine, of its perfect preservation, its convenient and agreeable administration, and, above all, its sensibly increased therapeutic action in the form of Granules.

Agent for the United States, F. A. REICHARD,
61 Walker Street, a few doors West of Broadway, New York.

Sent Free by Mail on Receipt of Price.

Illustrated manual of Operative Surgery and Surgical Anatomy.

Edited, with Notes and Additions, by W. H. VAN BUREN, M.D., Professor of Anatomy, University of the City of New York, and E. S. ISAACS, M.D. Complete in one volume, 8vo., with 118 colored plates, half-bound morocco, gilt tops. Price, $15 00 The same with plain plates, $9 50.

BAILLIÈRE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Records of Daily Practice: a Scientific Visiting List for Physicians and Surgeons.

CONTENTS:

Present State of Patients	72	double pages.
Microscopical Examinations	4	pages.
Obstetrical Engagements	4	"
Vaccination "	4	"
Consultation and other Professional Engagements	4	"
List of Nurses and Address	4	"
Meteorological Observations and Endemic Influences	4	"
Miscellaneous Memoranda	6	"
Index of Patients	4	"

This little book is not intended to supersede the use of a regular visiting list; its aim, as the title indicates, is to supply a medium for taking notes of the state of the patient, as soon after the visit as it is possible, and whilst the facts are still fresh in the memory. In hospital practice we believe it will be found invaluable. The arrangement, under the head of "*Present state of the Patient*," is admitted, by competent judges, to be all that could be desired.

Price, in cloth, 50 cents, or in pocket-book form, 75 cents, by mail, free on receipt of the price.

BAILLIÈRE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Compendium of Human Histology.

—By C. Morel, Professor Agrégé à la Faculté de Medicine de Strasbourg. Illustrated by twenty eight Plates. Translated and edited by W. H. Van Buren, Professor of General and Descriptive Anatomy in the University of New York. 1861. Pp. 207. Price, $3 00.

It is the best compendious treatise we have seen. The plates are admirable, some of them illustrating most beautifully the views of Virchow upon the office of the cell in the formation of tissues, both normal and pathological.—*Boston Medical and Surgical Journal.*

BAILLIÈRE BROTHERS, 440 Broadway N. Y.

Sent Free by Mail on Receipt of Price.

Illustrated manual of Operative Surgery and Surgical Anatomy,

by Drs Bernard and Huette. Edited with notes and additions, and adapted to the use of the American Medical Student, by Drs. W. H. Van Buren and C. E. Isaacs. Illustrated with Steel Engravings, from drawings after nature. 8vo. Colored Plates, $15.00; Plain Plates, $9.50.

BAILLIÈRE BROTHERS, 440 Broadway, N. Y.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.

By SAMUEL R. PERCY, M.D.,
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE IV.—PART II.

IODINE AND ITS COMPOUNDS.

In the treatment with external applications of iodine, the success will depend upon the method in which it is applied, as well as in the preparation made use of. For ordinary application to adults both the tincture and the compound tincture are too weak in iodine, and I am in the habit of preparing a compound tincture in preference to a simple tincture, as the iodide of potassium makes the iodine more soluble not only in the alcohol, but by the absorbents of the skin. The officinal formula directs that half an ounce of iodine, and one ounce of iodide of potassium, be dissolved in one pint of alcohol; but for external use this contains an unnecessarily large proportion of iodide of potassium, and much too small a quantity of iodine. The preparation I usually use is made by dissolving half an ounce of iodide of potassium, and an ounce and a half of iodine, in a pint of alcohol of about eighty-six per cent. If but a mild effect is wished, one application of this with a camel's hair pencil over the surface will be sufficient; but in many instances it will be necessary to renew it two or three times, merely waiting until the previous application is dry, and this may be repeated at first twice in twenty-four hours, afterwards, once a day or once in two days as required, but often enough to produce free and frequent exfoliation of the skin. If but one application of the iodine is needed, or if the application is made at long intervals, I usually apply over the spot painted by the tincture a good coating of iodinal collodion, made after the following formula:—Take of iodine, two drachms; Canada balsam, one drachm; collodion, four ounces; dissolve first the iodine, then the Canada balsam in the collodion. The cork of the bottle should be perforated by a peg of wood, to which a camel's hair brush should be attached. Some persons use this collodion without any previous application of the tincture, but I think a better effect is produced by applying the tincture first and then coating it with collodion. By this means the pores of the skin are not immediately closed, and the iodine exerts a more energetic effect, and the evaporation of the iodine is to some extent prevented by the outer covering of collodion. The balsam is added to prevent its cracking. But if a daily application of iodine is needed it is not well to paint it over with the iodinal collodion, because so long as the collodion remains it will prevent the action of the next application of iodine on the skin. In cases of synovitis, tonsillitis, etc., it is better to use the compound tincture I have mentioned, and then cover the spot with a piece of oiled silk, and cover the silk with a bat of cotton. I am satisfied I have discussed many a non-syphilitic bubo by this means, and quickly relieved cases of synovitis. In the photophobia scrofulosa of which I have spoken, I generally if possible apply my compound tincture over the brow until it is of a dark color; two successive applications will generally be sufficient, but sometimes I apply a third, waiting a minute or two for the second to dry: over this spot I then apply a piece of oiled silk, and over this a bat of cotton, the whole being kept in place by two or three strips of isinglass plaster. There will be a burning pain for a short time, but it soon subsides, and this pain may be to a great extent prevented by smearing the spot slightly with castor oil before applying the oiled silk. The same plan may be adopted over the tonsils, behind the ear, or any spot where it is difficult to keep the oiled silk on.

Of late years, glycerine has been added to the compound tincture of iodine, to prevent its drying so quickly, when used as an external application, and in some instances is very beneficial, especially where it is desired to cover the part with oiled silk. From one to two drachms of glycerine may be added to an ounce of the compound tincture. It is more serviceable when applied the last time, just before covering it with the silk.

For external application, an iodine ointment, and a compound ointment of iodine, are frequently made use of.

For the iodine ointment, the U. S. Dispensatory directs twenty grains of iodine and four grains of iodide of potassium to be properly incorporated with one ounce of lard. For the compound iodine ointment, fifteen grains of iodine and thirty grains of iodide of potassium are incorporated with an ounce of lard. An ointment of iodide of potassium is made in the same way, by dissolving a drachm of the salt in the same quantity of boiling water, and incorporating it with an ounce of lard; but I have been in the habit of using, in the place of these, the following formulæ, which, I think, possesses advantages over those just mentioned, for the following reasons:—the compounds thus prepared are more easily made, and on account of their solubility are more thoroughly incorporated, and keep better, and crystallization of the iodine and iodides is prevented:—

Iodine Ointment.—Take of iodine, two scruples; iodide of potassium, eight grains; glycerine, four drachms; lard, twelve drachms. Rub first the iodine and iodide to a powder, then add the glycerine, and when the solution is complete, add the lard.

Compound Iodine Ointment.—Take of iodine, half a drachm; iodide of potassium, one drachm; glycerine, four drachms; lard, twelve drachms. Rub the iodide and iodine to powder, then add the glycerine; and when the solution is complete, add the lard.

Iodide of Potassium Ointment.—Iodide of potassium, two drachms; glycerine, four drachms; lard, twelve drachms. Rub the iodide to powder, dissolve in the glycerine, and add the lard.

These ointments are chiefly used for friction, over enlarged glands, as dressings for indolent scrofulous ulcers, and as applications to scrofulous diseases of the skin and scalp.

In scrofulous affections of the lungs and air passages, inhalations of iodine have been recommended, and for this purpose iodine has been incorporated in pastilles and burnt. I have never used it in inhalation for this purpose; but in the chronic catarrhal affection of the nasal mucous membrane and pharynx, I have found a few drops of a solution of iodine in ether, dropped on a hot plate, and the vapor inhaled, of frequent advantage.

The general external application of iodine, by means of baths, was first recommended by Dr. Lugol, who used the baths very extensively, and considered them very valuable in the treatment of scrofulous complaints, where the digestive organs were deranged. To prepare the bath, from four to eight drachms of iodide of potassium are dissolved in a pint of water, and from two to four drachms of iodide added; this is mixed with sufficient water for a bath, in a wooden bath tub, and the baths are used every other day. For a time after the bath the skin is colored, but the color soon disappears, unless the baths are frequently repeated, when the color becomes more permanent, and only disappears with the desquamation of the cuticle. Local baths of this description may be also applied to one or both feet, or to the arms, in cases of local diseases of the skin.

Iodine, when taken *internally*, has, more than any other remedy, the power of counteracting the poison of scrofula. This disease, which is so common, and which exists not only in individuals but in whole families, becoming hereditary through many generations, is more easily controlled or palliated since the introduction of the use of iodine and its compounds, than it was previous to that time. It undoubtedly exerts a better influence upon those cases of

strumous disease, which seem to be generated by errors of diet or habitation, than in those who have inherited the diathesis through many generations of the same family. In the former cases we not only occasionally, but generally, see a marked improvement in the health of the individual, by proper doses of the compound tincture of iodine, or the iodide of iron, even where the diet and habitation are unchanged; but the benefit is rapid and almost daily perceptible, when in addition to the administration of the iodides, a proper diet, habitation, and clothing are enjoined. The hereditary cases are very intractable, and difficult of cure; but the poison in the system of the individual is generally much palliated by the treatment with iodine, which prevents it from destroying the life, or appearing to any great degree in the system of the individual, though it may not eradicate the poison, and prevent its appearance in the next generation.

There is a marked difference in the features of the disease in these two instances; the former is nearly always associated with anæmia, and requires restorative as well as catalytic remedies; the latter is complicated with nervous derangements and an enfeebled power of assimilation, which requires a combined treatment of stimulants or sedatives, with the catalytic. In the former cases, the iodine, in combination with iron, quinia, and cod liver oil, is more efficacious; in the latter, the iodine, in combination with ammonia or potash, with the addition of strychnia, wine, hydrocyanic acid, or hyoscyamus, will be found more beneficial. The scrofulous diseases of children are, as a rule, more quickly and surely benefited by the iodides than these diseases in older persons. Independent of the quicker assimilation and metamorphosis of tissue in children than in adults, we should look for this effect from the known action of iodine. When taken for some time, iodine, like antimony, mercury, and arsenic, has the effect of diminishing the amount of fibrine, and of impoverishing the blood, thus producing a rapid alteration in the composition of that fluid, and necessarily through that, of the solid solid structures also. All the remedies of this class which we have hitherto brought to your notice, promote absorption; this is eminently the case with the one of which we are now speaking. They all also exert a special influence over morbid poisons, by neutralizing them, and causing their disappearance from the system, and thus not only removing the poison, but removing also the abnormal tendencies. We have volumes of testimony as to the great value of iodine in the treatment of scrofulous disorders, and in the hospital practice of many eminent physicians who have used it, we find innumerable cures of glandular swellings and abscesses, of ophthalmic strumous diseases, scrofulous ulcers, skin diseases, and scrofulous affections of the bones. But you will find equally in private practice as in that in hospitals, the necessity of a close attention to the habits and diet of your patients, and you will find there are many whom you cannot induce to practise the necessary ablutions to produce cleanliness of the body. In such instances you will find great advantage in directing a given quantity of the compound tincture of iodine to be put into a basin full of water, and certain parts of the body to be washed each day, so that every two or three days the whole body may be washed over. Cleanliness is indispensable in these diseases, and it has no ill effect to minister to the mind as well as the body. Do not forget that in the treatment of scrofulous diseases, above all others, you need all the assistance you can obtain, from improvements in diet, exercise, cleanliness, and all other means that will tend to promote the general good health of your patient; and do not, when your patient is well from the effects of all these combined, in addition to the iodides you have been giving, say, as several thoughtless persons have said, that they would have been equally well without the iodine. I have seen such cases tested, with and without the iodine, and the improvement under the treatment with the iodides was most plainly marked. But do not imagine that you will cure, or even palliate, all diseases of a strumous character with the iodides; for there are many that will resist your best skill and efforts.

Iodine was first used in treatment of *goitre* or *bronchocele*, and there is no remedy now known so efficacious as this. Boyle reports three hundred and sixty-four cases treated with iodine, out of which two hundred and seventy-four were cured, in these instances approaching nearer to the character of a specific than any other remedy with which we are acquainted.

In *Phthisis*, from its analogy to scrofula, it was for some time hoped that iodine would be equally efficacious as in scrofulous disorders; but it is now acknowledged that iodine possesses no power of arresting tuberculous deposits in the lungs.

Syphilis.—For this affection the iodide of potassium is most generally used, but is confined to the latter symptoms, being of little service in the primary affection. In pericstosis and eruptions of the skin, with nodes, and rheumatic pains accompanying this disorder, five or six grains of iodide of potassium administered three times a day, will most generally give relief; and where it fails, the red iodide of mercury, combined with smaller doses of the iodide of potassium, will frequently effect a cure. I need not refer again at any length to these syphilitic disorders, as I spoke of their treatment quite fully under the subject of Mercury.

Rheumatism.—The iodide of potassium is frequently used in the treatment of both the acute and chronic forms of this disease, but its chief value in this disorder is in the rheumatic pains which constitute one of the chief features of tertiary syphilis. In other forms of rheumatism it is quite uncertain, though it is frequently used, and sometimes with benefit in the acute disorder; in these instances it is usually administered in large doses freely diluted with water, and I think the effect is as much attributable to the potash as to the iodine.

We find, then, the chief internal use of iodine and the iodides to be, to counteract scrofulous diseases, and tertiary syphilitic disorders. Iodine has been used as an injection in spina bifida, curing, under the observation of one gentleman, five cases out of twelve. It has been frequently also employed as an injection in hydrocele.

Administration.—Iodine is probably never administered in the solid state, and it is but seldom used internally in the form of simple tincture. It is nearly always administered in combination with either iodide of potassium, ammonium, or sodium, as with these preparations it is soluble in water. The favorite preparations for the internal exhibition of iodine, are the compound tincture of iodine and the compound solution of iodine. The compound tincture is prepared by dissolving half an ounce of iodine, and an ounce of iodide of potassium, in a pint of alcohol. The compound solution is stronger, and contains six drachms of iodine, and an ounce and a half of iodide of potassium, in a pint of water. This is generally called "Lugol's Solution." The dose of this latter is from five to twenty drops in a glass of sweetened water; the former preparation may be given in a third larger doses. Unless largely diluted it should not be given upon an empty stomach. There are many persons who object to giving any of the preparations of iodine after eating any substances containing starchy matters, and as starch is so constant an element of our food, they recommend that it should always be given some time before eating, otherwise the iodine will be decomposed by the starch; but this is all theoretical, as we will prove to you by-and-by. Although when given in large doses portions of undecomposed iodide of starch do occasionally pass with the feces, such is but seldom the case when given in small quantities, even though administered with amylaceous food. If the stomach is in an irritable condition, it is necessary to dilute all the preparations quite freely, or their topical action may increase the difficulty, and in these cases it is better to administer it immediately after a meal. Of the preparations of iodine for external use I have spoken before; of the compounds for internal administration I treat at our next lec-

ture. Iodine is incompatible with all the alkaloids, and precipitates them from their solution.

In Poisonous Doses.—I cannot speak of the effects of Iodine in poisonous doses from my own observation, for I have never seen a case, and from its disagreeable taste it is hardly probable that any person would attempt to poison another with it. There are but few cases of poisoning with iodine to be found in the works on Poisons. If a large or poisonous dose were taken, it would produce a sense of heat and constriction in the throat, a feeling of oppression, with nausea, eructations, and pain in the epigastrium, with vomiting, colicky pains, and other symptoms of gastro-enteritis.

The Treatment would consist in giving starch or flour mixed with warm water, and emetics to promote free vomiting. If a large quantity has been swallowed, it would be better to use the stomach-pump.

Detection of Iodine in the tissues after death, or in the Excretions.—It is not probable that death would take place very quickly after the administration of iodine, unless a very large quantity was taken. If death was caused by the primary effects a small quantity of it would no doubt be found in the stomach; and the mouth, throat, œsophagus, and stomach, would be colored with it, giving demonstrable proofs of its presence; but the *color* would soon be destroyed by the action of the organic secretions. But if death did not take place until several days after its administration, or if even many hours had elapsed, no iodine would be found in the tissues; and the only evidences of its presence must have been sought for during the life of the individual in the urine and fæces. If iodine or the iodides are sought for in the tissues, the parts should be finely divided and macerated in water, to which a small amount of potash in solution may be added, and the whole carefully boiled in a glass or porcelain vessel; the after treatment will be the same as that for the examination of the urine for the same substance.

I have frequently examined the urine of patients who were taking moderate doses of iodide of iron, and have oftentimes been unable to detect the slightest trace of iodine, although the fæces were uniformly stained of a dark color by the iron. It is more readily detected where one or two large doses, of two drachms or more, of iodide of potassium or ammonium have been taken, or where it has been taken in moderately full doses of ten to twenty grs. for some time. I have been unable to detect any iodine when the iodide of mercury was taken uncombined with iodide of potassium.

In Examining Urine for Iodine, it may be evaporated by a moderate heat nearly to dryness; this may be digested with alcohol, filtered, and again evaporated; the dry residue treated with warm distilled water and filtered. To a part of this solution, nitric acid in small quantity may be added, and a solution of starch, or starch paper, be put into it; if iodine is present, a blue tint is developed, more or less deep, according to the amount of iodine present. Greater delicacy of reaction may be obtained by adding chlorine water instead of nitric acid, previously neutralizing the alkalinity of the solution with sulphuric acid; but great care is requisite not to add the chlorine in excess, or it will immediately destroy the blue color of the iodide of amylum. To avoid adding the chlorine in excess, it should be largely diluted and added guttatim. I yesterday took, in three doses, at intervals of about two hours, half an ounce of iodide of potassium largely diluted; the urine passed during the time and for some hours subsequent was saved, and treated in the manner I have just given you above. This is the solution from it. You see by the two tests I have just tried, that iodine exists in the excretion in considerable quantities. We will now take another portion of the solution and add to it a solution of nitrate of silver; you see that a yellowish white precipitate of iodide of silver is immediately produced.

To another portion of the solution we will add a solution of the corrosive chloride of mercury; a bright red precipitate is formed, which you perceive again redissolves, owing to an excess of iodide of potassium. As we add more of the mercury solution the precipitate remains undissolved.

To another portion, we add a solution of the protochloride of palladium, which produces a brownish black precipitate of iodide of palladium. With acetate of lead a yellow precipitate of iodide of lead is produced. If we add to another portion of the solution a small quantity of nitric acid, the solution which was previously colorless shows a yellowish tint, which becomes deeper as we apply heat; this is owing to the formation of nitrate of potash and the liberation of iodine. Tartaric acid occasions a precipitate of cream of tartar, and iodine is liberated, which may be shown by the blue color imparted to starch.

We will try another very delicate test. To a portion of the solutionc hlorine water is added guttatim, and you see that now a slight discoloring of the solution is observable; we now add more chlorine, and we again have a colorless solution. In the former case, the chlorine united with the alkali, and set the iodine free; in the latter, a colorless chloride of iodine is formed. If we add to the solution, while discolored, some ether, and shake the mixture, the ether dissolves the liberated iodine, and floats on the surface, having acquired a reddish yellow color. To a portion of the solution we will add a drop of nitric acid and about six drops of sulphuric acid, to this we will add a little chloroform. You observe, as the chloroform settles in the tube, it assumes the peculiar violet, iodine color. When the iodides exist in considerable quantity in the urine, it may frequently be detected without evaporating the fluid by merely adding to it, when cold, nitric acid and starch, in the manner as directed above; but, as the urine itself has the property of decolorizing iodine, nitric acid must be added in sufficient quantity to cause the separation of the iodine from the organic matters in the urine. If fresh urine be added in sufficient quantity to iodide of starch, it will completely deprive it of its blue color.

(*To be continued.*)

Original Communications.

ON CERTAIN OF THE

ACCIDENTS WHICH MAY FOLLOW VACCINATION.

By HENRY M. LYMAN, M.D.,
HOUSE SURGEON TO BELLEVUE HOSPITAL.

(*Continued from page* 107.)

The possibility of communicating the poison of syphilis after the disease has reached its secondary stage, has long been a question agitated by the schools. That the virus of a chancre will take effect even when mingled with lymph from a vaccine vesicle, has been proved by the experiments of French observers. It also seems highly probable, if not actually proved by the result of accidents which have been observed by competent authorities, that whenever the vaccine disease is excited in an individual who is the victim of constitutional syphilis, the products of the inflammatory process, thus excited, may be so modified by the syphilitic saturation of the system, that they may even produce a similar syphilitic condition when transferred, by inoculation, to the tissues of a healthy person. Heine, of Bamberg, relates (*Edinburgh Med. Journal*, 1858–9, p. 605), that thirteen children, born of healthy parents, were vaccinated with lymph taken from the child of a syphilitic mother. This child was at the time covered with bullæ, excoriations, and sores, and soon died. Nine of the children thus vaccinated, were immediately affected with syphilis; phagedenic ulcers were found at the points of inoculation, and glandular swellings, condylomata, etc., followed. In two of the four children who were not affected by syphilis, the vaccination either produced no effect, or the vesicles never maturated; and in the other two cases

no result ensued, as the mothers, alarmed by the aspect of the child from which the lymph was taken, had removed the vaccine virus from the arm as soon as they could. The same authority has also recorded the case of three young physicians "who inoculated themselves with vaccine lymph from a syphilitic child, as a foolhardy bravado; and two of them suffered from unmistakable syphilitic sores, etc., in consequence." Viani, an eminent Italian physician, relates a very interesting case of syphilitic poisoning by vaccination, which is recorded in the *Gazetta Med Lombarda* for 1849 (*Gazette Médicale de Paris*, 1849, p. 874). "N. N., a woman of irreproachable habits, married in Egypt, returned with her husband to Italy, A.D. 1838. After several months, she was delivered of an infant, which at first she nursed herself; but syphilitic ulcerations occurring about her breasts, although she had never supposed herself in any way tainted with this disease, she was obliged to confide the child to the care of a wet-nurse. This nurse, though previously a healthy woman, soon exhibited evident signs of syphilitic disease. The same accident befell a second woman, and then a third, who had been employed to nurse the child. One of these nurses was also suckling another infant, to whom she communicated the disease, producing ulcerations in the mouth, etc., which resulted in its death. Entrusted, at length, to the care of two of its uncles, who surrounded it with every precaution, the child of Mme. N. N. presented no morbid symptom but a slight ophthalmia. It was vaccinated at this time. As small-pox was then prevailing epidemically, many physicians were in the habit of re-vaccinating persons who had been previously vaccinated. The child's uncle and aunt, one twenty-eight years, the other twenty-three years of age, wished to be re-vaccinated, and insisted on inoculation with lymph from the arm of their nephew. The physician (M. Viani), being not then acquainted with the antecedents of the child, complied with their wishes, though with considerable hesitation because of the ophthalmia from which it was then suffering. Everything proceeded as usual till after the time of pustulation, when, at the points of inoculation, were formed hard, rough scabs, surrounded by an areola of a reddish yellow color, different from the normal vaccine scab. The uncle was speedily covered, over the whole body, with a scabby eruption, and the symptoms of constitutional syphilis were soon well marked. * * * The aunt, at first, had ulcerations and condylomata about the vulva and anus. The cervical glands then became inflamed and suppurated. Ophthalmia at length occurred. It was only after five years of the most assiduous treatment that the unfortunate family were restored to health."

There is in this narrative a slight degree of uncertainty with regard to the original source of the syphilitic disease. The child appears to have been the victim of hereditary syphilis, which was of a nature so virulent, that every one who came in contact with its secretions was affected by the disease. It is worthy of note that in this case, as in others yet to be quoted, the vaccine disease appeared to run its course without disturbance, while the disease which was afterwards excited with lymph drawn from this apparently healthy vesicle, was irregular in its conclusion, and was speedily followed by syphilitic manifestations. Healthy virus excited an apparently normal process of pustulation in the child; the products of this process, modified as they must have been by the constitutional condition of the patient, excited a dual action in the persons to whom they were transferred. The relations of this history to the question of the transmission of constitutional syphilis are very evident.

It is a remarkable fact, that virus thus taken from persons who are infected with syphilis, does not produce the same results in all cases. The majority of cases vaccinated with lymph taken from syphilitic subjects escape the effects of syphilis. Dr. Lecoq (*Gazette des Hôpitaux*, Dec. 24, 1859) re-vaccinated a number of the soldiers of the regiment stationed at Cherbourg with vaccine lymph, taken from healthy-looking vesicles on the arm of another soldier, who, three months previously, had an indurated chancre, for which he had gone through a course of treatment at the Marine Hospital—a circumstance unknown to Dr. L. at the time of vaccination. In only two instances did any unusual symptoms appear; in the two unfortunate cases, eight days elapsed without irritation or inflammation at the points of vaccination. On the eighth day, in each of these individuals, one of the three punctures which had been made in the arm began to inflame, and resulted, in a few days, in an obstinate ulcer, with ragged margins and a hardened base, presenting a violet color, and becoming covered with a brown scab, that confined an unhealthy ichorous pus; the axillary glands of the same side became enlarged. These ulcers resisted every application, and were more than a month in healing. Symptoms of constitutional syphilis declared themselves—in one case six months, in the other three months after re-vaccination—presenting themselves in the form of sore throat, adenitis, and cutaneous eruptions of an undoubtedly specific nature, and it was only after a long course of anti-syphilitic treatment that relief was procured.

It is not impossible that these soldiers were syphilitic subjects, having the poison of syphilis latent in their veins, before their submission to re-vaccination. Of this, however, there is not the slightest evidence. Dr. Lecoq and Dr. Fonssagrives, the physicians who had the patients under observation, made the most diligent efforts to discover evidence of a previous syphilitic taint, but could not detect the slightest mark of such an accident. The men, of course, denied that they had ever contracted any form of venereal disease, and their physicians were finally constrained to believe in the truth of their statements. It is strange that they alone should have suffered, when so many others were equally exposed to the same danger. It is a circumstance which adds weight to the opinion that the poison of constitutional syphilis is not easily communicated from person to person.

Cullerier, a distinguished French authority, commenting upon a case of alleged transmission of syphilis by vaccination (*Bulletin Gén. de Thérap.*, July 15th-30th, 1855), declared that it was an impossible accident, for he had "not only vaccinated syphilitic children without ever seeing the vaccinia in any way modified by the syphilitic diathesis, but he had vaccinated healthy children from syphilitic infants, without ever perceiving the slightest unpleasant results." Considered in the light which more recent investigation has thrown upon the subject of syphilis, the accident might not now seem so improbable as it did when the details of the following history were made public.* A homœopathic practitioner, of Hollfeld, Bavaria, vaccinated eight children, the 16th of June, 1852. These children were all the healthy offspring of healthy parents. The virus was taken from an infant, three months old, the child of an unmarried woman, who before her confinement had been subjected to anti-syphilitic treatment, on account of suspicious ulcerations about the mouth and the genital organs. At the time of vaccination this child appeared to be in excellent health, though there were then a few pustules upon its legs. This eruption extended to the anus, and to other parts of the body, causing great illness, and the death of the child, in less than two months after its vaccination. Besides the eight children vaccinated with virus thus procured, three other children in the same neighborhood, and two in an adjoining parish, were vaccinated from the same source. These five presented normal vaccine vesicles without any subsequent symptoms of syphilis; but in the eight children first mentioned, the results were wholly abnormal. In the greater number, the first effects of vaccination were delayed for fifteen days, or longer. Small, imperfect vesicles then formed at the punctures; these vesicles soon degenerated into small, purulent ulcers, which gradually extended, some superficially, others deeply. The rest of the eight children showed vaccine vesicles on the eighth day, as usual, but these soon changed

* *Gazette Hebdomadaire*, March 9th, 1855. *Bulletin Gén. de Thérap.* 1855, vol. ii., p. 44. *L'Abeille Médicale*, tome xii., p. 169.

into little ulcers, which became confluent, and healed very slowly. The majority of these children showed symptoms of constitutional syphilis three months afterwards, and communicated the disease, in several instances, to their mothers and nurses.*

These cases serve to illustrate the previously noticed fact, that syphilitic poisoning does not always follow the use of *syphilo-vaccine* lymph. This would seem to depend upon the different susceptibility of each individual—in other words, upon unknown individual peculiarities, which, perhaps, may be analogous to those which render certain persons so much more than others liable to an attack of gonorrhœa, or any other contagious disease to which they have been exposed.

It is also worthy of remark that several of these children displayed perfect vaccine vesicles, which presented no appearance of syphilitic disturbance until the eighth day, when they degenerated into chancrous ulcers. Others manifested no sign of constitutional contamination before the third week. It seems to be the rule that the vaccine disease does not give way to the syphilitic before the inflammatory process has reached the pyogenic stage, which usually occurs about the eighth day. Dr. Heine, it is true, (loc. cit.) asserts that the children under his observation "were immediately affected with syphilis," but this may mean any period from eight hours to eight days. It is a statement too indefinite to carry any weight one way or another. The manifestation of the poison of syphilis in a state of activity seems to coincide with the formation of pus: if it can be shown that the poison itself has its seat in the pus-cell, we may be able to theorize, with some degree of plausibility, concerning the causes which have protected so many individuals who have been vaccinated with syphilo-vaccine matter. Lymph is usually taken from a vaccine vesicle before the eighth or ninth day, for the sake of procuring a virus free from purulent admixture. We have already seen how disastrous may be the consequences of vaccination with purulent virus; if now it can be shown that a vaccine vesicle developed upon a syphilitic subject only acquires the syphilitic taint with the formation of pus in its contents, we can easily see that a physician who carefully chooses lymph from vesicles in which pus has not been formed, may vaccinate with a success equal to that which Cullerier claimed for himself. If, on the contrary, there be used a virus which has become wholly purulent, and through that change analogous to the discharge of a chancrous ulcer, syphilitic inoculation might be expected with the utmost degree of certainty. But, if virus be taken from a vesicle whose contents are partially modified by the incipient formation of pus within its cavity, a variety of results may follow its use: that portion of the lymph which is uncontaminated should produce the simple vaccine disease without any syphilitic sequences, while the portion which is undergoing purulent modification should produce a vesicle varying more or less from the normal type, and should infect the whole system with the poison of syphilis.

Now the use of lymph which is undergoing purulent modification is the danger to which vaccination is most liable. It requires close observation and careful discrimination to decide upon the exact time at which the contents of the vaccine vesicle are most fit for use. In shunning Scylla one is nearly certain to fall upon Charybdis. It is usually upon the eighth day that the lymph is most perfect; before that time it is not sufficiently elaborate, after that time it becomes mixed with more or less purulent matter. But it is not always precisely the eighth day which exactly marks the period of maturity. The processes of inflammation are conducted more rapidly in some cases, more sluggishly in others, so that time alone is not the only condition requisite to the perfection of lymph.

Unfortunately, we have not yet accumulated a sufficient number of observations on this subject, to throw much light upon the questions under discussion. The experience of Dr. Wegler* affords the only positive indication of the direction which our inquiries should assume. He relates that at Koblenz, in 1849, "a surgeon vaccinated, with the same lymph, twenty-six individuals, and in nineteen of these (from eleven to forty years of age) vesicles appeared. But in three or four weeks they exhibited all the signs of venereal ulcerations, and were, in most of the individuals, followed by sore throat, eruptions, and pains in the head. * * * The child whence the lymph had been obtained, had been vaccinated February 4th, and as the vesicle was very slow in progress, the surgeon did not take lymph from it until the 14th and 15th, when it was, consequently, eleven or twelve days old.† Other children, however, were then vaccinated with it without ill effect. *Of the twenty-six re-vaccinated, much the largest number fell ill in whom the lymph of the 15th had been used.* Some time after the lymph had been taken from the child, it exhibited copper-colored blotches, and at a later period died of supposed water on the brain."

Here was an observation which bears directly upon our theory. Could we multiply such observations, its accuracy might very easily be tested by a comparison of results; but hitherto the whole subject of the transmission of morbid poisons has been veiled in such obscurity that few observers have had knowledge and insight sufficient to make their facts intelligible and available.‡

(To be continued.)

BENEFICIAL RESULTS
FROM THE USE OF
MECHANICAL APPLIANCES IN POTT'S DISEASE OF THE SPINE.

ILLUSTRATED WITH CASES.

By JACOB A. WOOD, M.D.,
OF NEW YORK.

(Continued from page 81.)

Case II.—The son of Mr. K——, of New York, æt. six years and nine months; complexion fair, but not denoting a decidedly scrofulous diathesis, first came under treatment for Pott's disease of the spine, December 6, 1860.

In July, 1859, the child had a slight fall, and was seized at once with severe pain in the back, extending down the right leg. He became nearly or quite helpless, and remained so for about three weeks. At the expiration of that time exercise upon the feet was attempted, but performed with great difficulty and pain. About three months after that, the child began to lean to one side, and to support himself, while walking or standing, by resting his hands upon his thighs, or upon a chair, lounge, or other object within his reach. The right leg was drawn up, and locomotion was performed with the heel raised from the floor. As the difficulty advanced this abnormal position became more apparent, locomotion more difficult, the pain more severe, both during the day and through the night, and in the paroxysms the child was powerless.

Upon examination I observed a posterior projection of

* The vaccinator was sued for alleged mal-practice by the relatives of these unfortunate children, and was condemned to suffer imprisonment for the space of two years. Appealing to a higher tribunal, the time was reduced, first to one year, then to six months, and, after consultation, on the part of the judges, with M. Heyfelder, a distinguished medical authority, who denied that secondary syphilis could be communicated by vaccination, the sentence was finally commuted to a fine, which was imposed as a penalty for the use of virus that had been procured from a diseased child.

* *Medico-Chirurg. Review*, 1851, vol. vii p. 538, quoted from *Med. Zeitung*, 1850, No. XVI.

† "The vaccinator, for having employed lymph thus old, was sentenced to two months' imprisonment and a fine of fifty thalers, leaving him still open to civil action on the part of the persons aggrieved."

‡ That constitutional syphilis is to a certain degree communicable, is now admitted by the highest authorities. That it may be communicated through the medium of virus used for vaccination is a fact which has also been remarked by Prof. Cerioli, of Cremona (*Revue Med.*, 1845, vol. iii., p. 54), by M. Levrat (*Journal de Médecine de Lyon*, July, 1848, p. 67), by Dr. Tassani (*Gaz. Med. de Milano*, Oct. 14, 1848) by Mr. Rees, of London (*Lancet*, 1857, vol i., p. 115), by Dr. Ceccadi (*Gaz. des Hôpitaux*, Dec. 24 1856), and by one of the oldest and most experienced medical practitioners in our own city, who has recently seen eight children affected with syphilis as a result of vaccination.

the third lumbar vertebræ, with the second forced somewhat from its normal position. The amount of deformity in this case was not so great as usually occurs in a much shorter space of time after the commencement of the disease. The *suffering* of the patient, however, as represented by the mother, was far greater than I have been in the habit of seeing.

Treatment consisted in the application and use of mechanical appliances, similar to those already presented to the reader in a previous number, together with some of the preparations of iron, as a tonic, and the extract of conium to relieve the pain; also, a generous diet and what exercise the patient was able to endure in the open air. Upon the application of the apparatus the relief from pain was very great, but not so complete as in the majority of cases to which it has been applied. About two months after the treatment commenced, and while the patient was doing well, he met with an accident in falling, which rendered him again nearly helpless. For about twelve days after the accident the suffering was so intense whenever the support to the spinal column was, in *any* degree, diminished, that the apparatus was not removed during that time. Whenever its removal was proposed the little fellow would tremble and scream in anticipation of the suffering that would follow. I may remark, in passing, that three other cases of a similar character have occurred in my practice. Whether standing, sitting, or lying down, neither of the cases could dispense with the apparatus for a single moment, without the most intense pain. In one it was not removed for the space of two weeks; in another for seven weeks; and in the third, that of a young physician in Massachusetts, it was worn for several successive weeks (the precise number I cannot now recall), without being removed for a change of under clothing, or any other purpose whatever, as in all the others referred to. I allude to these circumstances more particularly to show the importance of evenly adjusted and well adapted mechanical support in Pott's disease of the spine, for the purpose not only of making the patient *comfortable* while suffering from the disease, but of bringing the case to the most favorable, as well as speedy termination.

To return to the case under consideration, about five months subsequent to this, while the patient was improving well and able to play about, he received a blow from a stick in the hands of another child, directly upon the diseased bone, whereupon he fell instantly to the floor. A good deal of pain and difficulty in moving about followed, and, subsequently, a superficial abscess formed at that point. Since recovering from its effects, the patient has improved and done well up to the present time. He has suffered but little or no pain for the last eight months, and is now vigorous, robust, and healthy, with the curvature reduced as seen in the accompanying cut.

The degree of deformity that now exists, and here represented, is only about one-third what it was when my attention was first called to the case, and it is still gradually diminishing.

N. Y., 81 Cooper Institute, Feb., 1862.

M. Trousseau is now strongly of opinion that in those cases of chlorosis in which there is a tendency to tubercular disease of the lungs, preparations of iron, administered for some length of time, favor and hasten the development of the tubercles. It is, therefore, of every importance in treatment to distinguish between true chlorosis, and what he calls pseudo-chlorosis.—*Brit. Med. Jour.*

CONFLUENT SMALL-POX,

OCCURRING AFTER THREE SUCCESSFUL VACCINATIONS.

By T. C. WALLACE, M.D.,

ASSISTANT SURGEON, NINETY-THIRD REGIMENT N. Y. S. V.

Chas. Nichols, aged 35, a private in Capt. Barnes's comp'y, 93d regiment, N. Y. S. V., was vaccinated (with other members of the company) on the 24th day of Dec. 1861. I noticed on his right arm a large scar from a previous vaccination, which he informed me was done when he was a child, and on his left arm a similar scar, which he said was from a vaccination three years since. The vaccination of Dec. 24 worked admirably; the vesicle was fully formed, large, and well filled, and was accompanied by some slight constitutional symptoms. On the 8th day of January, just two weeks from the day of vaccination, I was called to visit him at his quarters, and found him with a very high fever, intense pain in his back and loins, and sore throat. I had him removed to the Post Hospital. On the following day there was an exacerbation of all these symptoms. On the morning of the 10th I found him perfectly covered with the eruption of variola. He was immediately removed to the Hospital for Small-Pox at the Almshouse. The case proved to be an extraordinarily severe one of confluent small-pox. Dr. Mattimore, Resident Physician at Almshouse, assures me it is the worst case he has had in a long time. I certainly have never seen any one so completely covered with pustules as he was. The matter used in his case was supplied from the Eastern Dispensary, N. Y. (50 points in a vial), and was perfectly good, as is shown from its effects on the rest of the company. The case is certainly a novel one, and as such I have reported it.

Reports of Hospitals.

NEW YORK HOSPITAL.

INJURIES OF THE HEAD.

THEIR NATURE AND TREATMENT, WITH ILLUSTRATIVE CASES,

By D. B. St. John Roosa, M.D., and James L. Little, M.D.,

Resident Surgeons.

Injuries of the head may be conveniently classified as follows:—1. *Scalp Wounds of Brain*; 2. *Concussion and Contusion of the Brain*; 3. *Fractures of the Base of the Skull*; 4. *Fractures of the Vault of the Skull*; 5. *Gunshot wounds of the Head.*

Scalp Wounds are among the most common lesions seen in civil hospital practice. The history often reads: "A man while intoxicated fell upon the curbstone and received a wound of the scalp, exposing, but not denuding the bone." On admission, the patient is not generally stunned. The occasion for surgical interference which oftenest presents itself is the hæmorrhage, which may be profuse, sometimes having quite weakened the patient before he is seen.

The only reliable, as well as the quickest method of arresting this is by direct pressure. We have the unyielding surface of the bone on which to exert it. A compress of lint, graduated, perhaps, and over it a skull cap bandage, is sufficient to check a hæmorrhage which may be quite alarming. In twelve hours after let the compress be removed, the vessels will be found to be closed, and we have a simple lacerated wound which it is the habit to treat with cold water dressings, until suppuration is freely established, when stimulating applications, *e. g.* the balsam and ungt. peru., are employed. Occasionally these wounds close by first intention, but this is very rare in hospitals. Great care must be taken that no dressings are used which will confine the matter. Suppuration is occasionally very great, and in some instances endangers life. Scalp wounds, even with no concussion of the brain, are not to be regarded lightly. The dangers may be said to be: Erysipelas, exces-

sive suppuration, death of exposed bone, pyemia, and rarely, tetanus.

"Injuries of the head affecting the brain are difficult of distinction, doubtful in their character, treacherous in their course, and for the most part fatal in their results." (*Guthrie.*) This aphorism will be found to be verified by the experience of all those, whether civil or military surgeons, who have to deal with this class of injuries.

Concussion of the brain will be noticed as the diagnosis of many published cases in which a post-mortem has been obtained and no lesion detected; the cause of death being assumed to be the "jar of the brain." Mr. Hewett, of St. George's Hospital, has suggested doubts as to whether death ever occurs from simple concussion, or whether there is not, as well, a contusion of the brain substance. In autopsies where no trace of injury to the brain in the way of compression or inflammatory action can be discerned, the brain substance should be very carefully examined for a contusion.

The case of a soldier, to be referred to hereafter, is a well marked one of concussion, and the treatment there indicated (daily purging, loss of blood by cups to temples), indicates that generally pursued in this institution.

The cases in which insanity followed what seemed to be concussion, are interesting. It may be suggested that here there was a lesion, a contusion of the brain substance, or a slight effusion. It is regretted that one case could not be followed up, the patient eloping after remaining for a period of four weeks *in statâ quo*.

Fractures of the base are usually fatal, but one will be found indicating a recovery. In reference to the value of the escape of cerebro-spinal fluid in cases of fractures of the base, it may be remarked in passing, that this effusion may occur in fractures of the vault of the cranium, where the injury has extended through the integument, bone, and membranes. Cases illustrating this point are on record. The prognosis in all cases of fractures of the base, and compound fractures of the vault, will be necessarily grave, although there will be many in which the surgeon will hesitate long before he diagnosticate between fractures of the base, contusion, compression, or concussion. Mr. Hewett thinks the differential diagnosis much more difficult than the precise rules laid down in the text-books would seem to indicate. Mr. Guthrie's opinions corroborate this.

Fractures of the vault, simple and compound, seem to be rare unless accompanied by depression; the cause of the injury scarcely ever stopping short of depressing some fragment of the bone. The rule adopted by the attending surgeons here is that now usually followed, namely, to wait for symptoms of compression before operating. The mortality of trephining is very great, there probably being some other lesion which the removal of the depressed bone does not reach.

Gunshot wounds of the head are deserving of a separate classification. The three cases presented, with their fatal termination, give some idea of the prognosis, and the little avail of treatment beyond securing a free opening, if, perchance, the foreign bodies which cannot be followed into the cavity, form an exit. Wounds of the front of the head, Mr. Guthrie remarks, are more dangerous than any other. All of the cases presented are of this variety. The formation of abscess of the brain is one of the common results of this injury. Surgeons have made bold cuts into the brain substance to secure their exit; the results do not invite repetition of the efforts. Dr. Detmold's case, *American Journal Medical Sciences, N. S.*, No. 37, page 86, will be found an interesting one.

SCALP WOUNDS.

I.—J. S., æt. 26, Ireland, seaman (Dr. Buck), admitted March 12th; discharged 12th August. Had a lacerated wound of the scalp, having been hit by a pewter mug over left parietal bone one week before admission; is suppurating very freely. The suppuration continued until May 25th, when it was checked; bone exfoliated, ulcer healed, patient was cured.

II.—A woman, æt. 23, New York, (Dr. Watson) was kicked on her head by her husband, producing a wound of the scalp over the parietal eminence. Wound bled freely. Patient was quite exhausted from it; rallied soon; complained of a little pain in the head, which was dissipated by a cathartic, and was seven days after discharged cured.

A man, æt. 41, England, mason, admitted Dec. 16th (Dr. Watson), fell from a scaffold two hours before admission, a distance of twenty feet, inflicting a wound of scalp over superior curved line of occipital bone; no fracture; hæmorrhage slight; shock moderate. Patient did well until eight days after, was up and about, and was discharged, cured.

IV.—A man, æt. 26, seaman, admitted Dec. 29th (Dr. Watson) with a lacerated wound on middle of temporal ridge of left side; hæmorrhage profuse; no shock. Received injury by falling on a curbstone while intoxicated. Did well, and was discharged cured two days after.

These cases are merely given as specimens of many of the same kind frequently met with in hospital practice. In Case III., from the extent of fall, we should have expected a greater amount of injury.

CONCUSSION AND CONTUSION OF THE BRAIN.

I.—A soldier, æt. 45, admitted December 29, 1861 (Dr. Watson), while riding down Broadway, intoxicated, fell from his horse, striking the back of his head, and was found senseless; half an hour after was perfectly unconscious; pupils dilated and insensible to light; pulse 90, and of good force; slight hæmorrhage from right ear and from nostrils; over left parietal region was a puffy tumor; bowels moved by injection. Delirium set in, rendering restraint of limbs necessary; delirium continued for thirteen days, although gradually assuming a milder type, when he became conscious and rational: had a slight purulent discharge from right ear. Gradually improved until a month after admission, when being well was discharged cured. The treatment consisted in daily cupping and purging. Cathartics and food were administered by closing his nostrils, and in the act of expiration he was obliged to swallow.

II.—A man, æt. 23, Irish laborer, admitted December 25, 1861 (Dr. Watson), was either thrown or jumped from a second story window; half an hour after found a scalp wound exposing but not denuding the bone, situated over parietal boss of left side; pupils sluggish; pulse 60 and feeble; intellect obscured; moderate hemorrhage. Was fully rallied on second day; mind seemed to be clear; water dressings applied; bowels freely moved. Six days after patient was noticed to be moody, talked incoherently, imagining that people intended to injure him; some pain was referred to mastoid regions; cupped, and blisters behind the ear. Treatment was persisted in until thirty days had elapsed.

III.—David Hetherman, æt. 24, Ireland, porter, admitted October 31, 1861 (Dr. Buck, attending surgeon), received his injuries by falling from a second story window, a distance of about twenty feet. On admission he was suffering from the following symptoms:—stupor, respiration natural, pulse slow and full, pupils somewhat contracted; he had vomited previous to admission. On examination no fracture of the skull could be detected. Third day after injury patient had reacted somewhat, and was quite delirious. Free movement of the bowels was induced, and wet cups were applied to the temples, and afterwards blisters behind the ears. From this time his senses returned sufficiently to recognise his attendants, but he was inclined to be violent, requiring forcible confinement to the bed. From this time until his dismission, which was about twenty days after the injury, he remained in about the same condition, recognising his friends, but having a mania to tear everything with his hands or teeth, singing and talking and giving other evidences of insanity. He passed his fæces and urine in bed. His friends state that

he gave no evidences of mental derangement previous to his injury, and no hereditary taint could be made out. He was removed by his friends, and nothing further has been heard from him.

IV.—Jacob Keizer, æt. 16, N. Y., admitted December 27, 1861 (Dr. Peters, attending surgeon). Patient received his injury by falling through a hatchway, a distance of about thirty feet. On admission he presented the following symptoms:—insensibility, moderate dilatation of pupils, vomiting, bleeding from the nose. No fracture can be detected. He remained in an insensible condition for four days after the injury, without any marked improvement. His treatment during this time was a free action of the bowels, cups to the temples, cold to the head. On the third day a puffiness of the scalp was observed, just above the superciliary ridge of the right frontal bone. This had a feeling as if a depression of the skull existed beneath. An incision was made down to the bone, and, after allowing the escape of a small clot of blood, the bone was examined and no fracture could be found. The edges of the wound were brought together and cold water dressings applied. On the sixth day patient began to show signs of improvement, and gradually grew better, and about four weeks after the injury was discharged. The most prominent feature of this case was that patient remained in an unconscious condition for four days, finally recovering without apparently any bad result.

V.—J. E. G., æt. 14, admitted Jan. 30, 1862 (Dr. Halsted). Patient fell from a scaffold, a distance of about fourteen feet. On admission was insensible; pupils normal, slight oozing of blood from the left ear, vomiting; on examination no fracture was detected, a slight contusion found over left temporal bone. Patient remained insensible for forty-eight hours after admission, when reaction having taken place, he became quite delirious, screaming night and day, and so restless that it was almost impossible to keep him in bed; on the third day after the injury, hemiplegia of the right side became well marked. Patient complained of severe pain in the head, which was shaved, and cold applied with wet cups to the temples. From this time patient gradually recovered his senses, so that by the eleventh day he appeared to be perfectly rational. Patient still remains in the hospital, and on the twentieth day patient begins to move his leg a little, arm and face still paralysed, intellect seems to be clear. Since admission patient's pulse has not exceeded one hundred at any one time, generally below seventy. The fact that the paralyses did not appear until the thirtieth day would seem to indicate that there had been a rupture of some vessel on the left side of the brain, with some effusion of blood. This, however, did not affect the pupils.

A New Domestic Poison.—Benzole is an organic product of distillation which ranks high amongst the recent useful gifts of chemistry to our national industry. It has lately come into extensive use for a variety of purposes, and has not hitherto been considered poisonous. A recent death has given occasion to investigations which prove that it is highly poisonous. At the inquest on George Gilbert, who died on the 3d instant, it appeared that the deceased, after sucking at a syphon which did not draw, inhaling the vapor of the benzole, and probably swallowing a portion of it, became sick and drowsy, his pulse feeble, and countenance livid. Dr. H. Barker was called to him, and he was treated with stimulants, but died in a few hours. The symptoms were those arising from the inhalation or swallowing of a noxious fluid. There was no trace of irritant substance in the stomach, nor had it any smell of bitter almonds. The brain, lungs, and liver were congested, and there were some patches of congestion on the coats of the stomach. The head had a slight smell of bitter almonds.—*Lancet.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, January 8, 1862.

DR. A. C. POST, PRESIDENT, IN THE CHAIR.

CARCINOMA OF KIDNEY.

Dr. Loomis presented a kidney, taken from the body of a male, æt. 38, a native of Ireland, who had been admitted into Bellevue Hospital with delirium. After this symptom passed off he complained of intense pain in the right lumbar region, which was increased by pressure. The treatment instituted consisted of opium and mild diuretics. His urine on microscopic examination was found to contain blood, but this disappeared after a while under the treatment alluded to, and in its stead albumen showed itself. For several months he was able to do duty as helper in one of the wards, but during the past month he became subject to repeated attacks, which simulated those attendant upon the passage of a renal calculus. After these attacks would pass away small blood-clots would be found in the urine. On the 1st of January he was taken with typhus fever, and died shortly afterwards.

On making the post-mortem examination the right kidney was found to weigh eight ounces, its lower half being occupied by a carcinomatous tumor the size of an orange.

Dr. Loomis presented a second specimen, taken from a native of Poland, æt. 35, who was admitted into the Hospital on the 16th of November. He was brought by his friends, who afterwards left him, and being unacquainted with any other language than his own it was impossible to get from him a history of his case. The symptoms at first so much simulated those belonging to fever, that Dr. Flint caused the patient to be sent to the fever ward, where Dr. Loomis saw him. He was then lying upon his back, being unable to change his position unless assisted; his pulse was 160 continually; he was conscious and able to articulate; his skin was not abnormally hot; there was no delirium, no paralysis, neither muscular twitchings; his urine was voided voluntarily, and his bowels moved daily; his pupils acted well, though slowly; he protruded his tongue in a direct line; there was no twisting of the head to one side, no want of co-ordination in his movements; in fact, none of the symptoms were present which would lead to the supposition of the existence of the disease which was found on post-mortem examination. He died suddenly and without convulsion on the 28th of December, his general symptoms remaining unchanged. On making the autopsy the membranes of the brain seemed to be preternaturally dry; no subarachnoid effusion; the right lobe of the cerebellum was found to be the seat of a tumor about the size of a small orange, it was covered by a layer of the brain matter about a quarter of an inch in thickness; on microscopical examination, granular matter, nucleated cells, and free nuclei with crystals of cholesterine were found.

Dr. Wood stated that he had found the tumor to consist besides of fibrous matter in considerable quantity.

TUMOR OF CEREBELLUM WITH MUSCULAR CO-ORDINATION.

Dr. Conant thought that the tumor was developed in the substance of the organ, and enlarged by simply displacing the tissues rather than by destroying them; and that if it had been sufficiently large to compress the cerebellum it would have had the same effect upon the medulla oblongata, giving rise to serious and alarming if not fatal consequences. In this connexion he mentioned a case of tumor of the pons varolii, which he had diagnosticated before death; the patient as long as he would look forward could move well enough, but the moment the slightest motion of the head suddenly to one side or the other was made he would become instantly paralysed. The specimen had been presented to the society several years ago.

Dr. Krackowizer thought that the theory of co-ordina-

tion, as connected with diseases of the cerebellum, had to suffer a great many restrictions. He had seen quite a series of cases reported in the *Lancet* in which no mention was made of that particular phenomenon.

Dr. Flint stated that he had met with two cases of cerebellar tumors in which there was a want of co-ordination.

Dr. Conant cited a case of a boy who had received a kick in the back of the head by a horse, and who was afterwards seized with tonic spasms, which continued for a week or ten days, at the end of which time he began to lose the power of co-ordination of the left side. If he wished to pick up anything on the floor on his left side, he was compelled to place his hand out from the body, and swing himself around. On post-mortem examination two-thirds of the substance of the cerebellum were in a state of softening.

The society was then, on motion, adjourned.

SURGICAL SECTION.

Stated Meeting, Jan. 24, 1862.

DR. JAMES R. WOOD, CHAIRMAN.

DISCUSSION OF DR. GEO. K. SMITH'S PAPER ON THE RELATION OF THE INSERTION OF THE CAPSULAR LIGAMENT OF THE HIP-JOINT TO INTRA-CAPSULAR FRACTURE.

(*Continued from page* 55.)

Dr. Geo. K. Smith, in replying to the remarks made at a previous meeting by Prof. Post, commenced by quoting the following from that gentleman:—"The fifth proposition seems to me to be founded on an error, or at least on a statement which has not been demonstrated to be a fact. The statement to which I allude is this, viz. that when the cervix femoris has been fractured, and the fragments have reunited, and the cervix is found on post-mortem examination to be shorter than that of the opposite side; the absorption to which the shortening is due, preceded the union of the fragments. It appears to me more probable that the union, in such cases, takes place in the first instance, and that the interstitial absorption is a subsequent event. This view would seem to be supported by the fact, that before union has taken place, the fragment connected with the head of the bone has a very imperfect supply of the veins or lymphatics through whose agency the absorption would be likely to occur."

It is very true that the fragment of the neck attached to the head of the bone is, to a great degree, deprived of its arteries and veins by the accident. If the force of the blow producing the fracture be sufficient to rupture the cervical ligament, and separate the fragments, the upper fragment is then supplied with blood by one, and in some cases two small arteries, which pass through the ligamentum teres to the head of the bone. The elements of nutrition being thus imperfectly supplied to this fragment, we infer that it will be absorbed with greater rapidity than the femoral fragment, which, after the fracture, has an abundant supply of blood. This will certainly be the case, provided that each fragment of the neck has a sufficient number of veins and lymphatics to accomplish its absorption. I have often examined that branch of the obturator vein which returns the blood from the head of the bone, and have usually found it about the size of a crow's quill; and while it is admitted that this is quite unequal to the number and calibre of the veins supplied to the femoral fragment of the neck, it must be remembered that *absorption through this channel is not held in check by the antagonistic force of an abundant nutrition.*

Prof. Post assumes, as a fact, that "before union takes place, the head of the bone has also a very imperfect supply of lymphatics, through whose agency the absorption would be likely to occur." It appears that the minute distribution of the lymphatic system is yet imperfectly understood by anatomists. Some authors state that bone tissue is not supplied with lymphatic vessels, while others claim that it is.

Cruveilhier states, that "lymphatic vessels have not yet been actually demonstrated in the bony tissue; but it is probable that they really exist there; at least, the process of nutrition in bones, and certain morbid phenomena which they present, lead to the belief of their existence."* "Cruikshank, Sœmmering, and Bonamy have succeeded in tracing them into the interior of the bones."† "Lymphatic vessels are found in most tissues and organs which receive blood, but have not been detected in the substance of the brain and spinal cord, in the eye-ball and labyrinth, nor the placenta and its membranes. The principal lymphatic vessels are more numerous than the arteries and veins, but very much finer. They are long, threadlike, transparent tubes, of difficult detection, unless some colored substance is injected into them. The mode in which the lymphatics commence has been imperfectly ascertained in consequence of the extreme tenuity and transparency of the vessels, and the impossibility of injecting colored liquids in a direction opposed to the opening of the many valves which occupy the larger branches. For the most part they appear to originate in close capillary nets, intercalated with the sanguiferous capillaries, but having no communication with them."‡ "The lymphatics are found in nearly every texture and organ of the body, with the exception of the substance of the brain and spinal cord, the eyeball, cartilage, tendon, membranes of the ovum, the placenta, and umbilical cord. Their existence in the substance of bone is doubtful."§ If from the conflicting statements of authors concerning this subject, we are led to believe that lymphatic vessels have not yet been discovered in the bony tissue, we are by no means at liberty on that account to deny that they really exist; for this summary method of disposing of the question would exclude further investigation, which might lead to their discovery.

Dismissing this point, we notice that Cruveilhier states that synovial membranes are abundantly supplied with lymphatic vessels, thus:—"The origin of the lymphatics can be shown only upon free surfaces, such as the mucous membranes, the skin, the serous and synovial membranes, and the lining membranes of arteries and veins. All the lymphatics arise by a network of such tenuity that when injected with mercury the whole surface appears changed into a metallic layer. The synovial membranes may be injected with the greatest facility, either near the cartilages where they are more tense than in other parts, or upon the ligaments to which they adhere."‖

If synovial membranes are thus abundantly supplied with lymphatics, it can hardly be doubted that there are lymphatic vessels in the ligamentum teres, which may become active agents of absorption, after fracture of the neck of the femur; since the ligamentum teres is enveloped throughout its extent by synovial membrane. Gray states that "the deep lymphatics accompany the deep arteries," and that "the lymphatics of any part or organ exceed in number the veins, but in size they are much smaller."

If now the lymphatics originate in accordance with Leidy's opinion, "in close capillary nets, intercalated with the sanguiferous capillaries," and pass in a direction from without inwards, accompanying the arteries, we can see no good reason why that branch of the obturator artery which supplies the head of the bone with blood, should form an exception to the rule. With our present imperfect knowledge concerning the origin and distribution of the lymphatics, it appears to me that the statement of Prof. Post, that "before union takes place the head of the bone has a very imperfect supply of the veins or lymphatics, through whose agency the absorption would be likely to occur," is a statement which requires further anatomical investigation before it can be admitted as a fact.

Whatever the agency may be by which the result is accomplished, absorption of the head and neck of the bone does

* Cruveilhier's Anatomy, p. 14.
† Pancoast's Wistar, vol. ii., p. 337.
‡ Leidy's Anatomy, p. 428.
§ Gray's Anatomy, p. 425.
‖ Cruveilhier's Anatomy, p. 612.

actually occur, without any apparent attempt at union of the fragments, and the rapidity of the absorption is sometimes so great, that nearly the whole of the neck has been known to be removed in less time than is required for bony union of this fracture; thus:—"the superior fragment of the broken cervix usually disappears to the level of the brim of the acetabulum, either in consequence of the action of the absorbent vessels, or by the friction of the broken surfaces, or perhaps it is due to a combination of both these causes. The absorption, however, sometimes extends much further; I have seen half of the globular head of the bone thus removed, and a case has been recorded in which the head of the bone was completely absorbed. * * * In old cases the femoral fragment is likewise absorbed to a greater or less extent; sometimes it disappears entirely to its base, and the portion of the shaft, from which, in the normal state, it springs, presents a smooth and even surface, limited by the trochanters and their connecting lines. * * * The absorption of the lower fragment is sometimes effected with extraordinary rapidity; in case No. ix., the shortening of the limb, which immediately followed the receipt of the injury, was only a quarter of an inch, but after the expiration of six weeks it amounted to one inch and a half; and in case No. xii., the removal of the greater part of the neck of the bone was accomplished in less than a month."* Here we see the effect, and from the effect we infer the cause which produced it; for, although we may be unable to trace the immediate connexion of cause and effect, we know that nature never accomplishes any purpose without employing means which are adequate to the ends produced. If after fracture of the neck the whole head be removed by absorption, without any attempt at union of the fragments, we are forced to conclude that the supply of veins and lymphatics to the head of the bone is sufficient to produce this result, since it is through the agency of these vessels that absorption occurs, and we can therefore see no physiological necessity for the absorption of the neck to be preceded by bony union of the fragments. I would not, under any circumstances, knowingly put a wrong construction upon the language of any surgeon; but, if I correctly understand the following proposition of Prof. Post, it does not seem to me to be strictly in harmony with his criticism of my fifth proposition:—"In intra-cervical fractures, whether bony union takes place or not, the cervix femoris becomes greatly shortened by interstitial absorption, and, after the lapse of several weeks or months, the limb may be shortened to the extent of two inches or more."

American Journal of Ophthalmology.—This is the title of a Journal to be edited by Julius Homberger, M.D., to be devoted to Ophthalmic Medicine and Surgery. It will contain: reports of operations, original articles and periscopes, from American as well as foreign sources. The Journal will be published bi-monthly, at $2 per annum, payable on receipt of the first number, by L. W. Schmidt, 534 Broadway, above Spring street.

The Influence of Railway Travelling on Public Health.—But in place of the many vague surmises heretofore hazarded on this subject we can now substitute accurate information as to the direct physical effects of railway travelling upon the body. These are, to produce a certain degree of muscular exertion; to increase the volume of air inspired; to quicken the circulation; to impress rapidly on the retina a succession of fleeting images; and to cause more or less hyperæmia of the brain and spinal cord, and some irritation of the gastric and sympathetic nerves by means of the vibratory movements of the trunk. Bearing in mind this general analysis of the effects of railway travelling, and giving due consideration to the circumstances which modify them if becomes possible to estimate at their true value the complaints as to the various illnesses and diseases which have been ascribed to it. In no case is it more desirable to test, one by the other, clinical experience and physiological observation.—*Lancet.*

* Smith on Fractures, p. 42.

American Medical Times.

SATURDAY, MARCH 1, 1862.

SELECTION *versus* SUCCESSION.

In every department of human enterprise and responsibility is heard the demand for "the right man for the right place." Military leaders, heads of departments, and officials of every rank, are inevitably the objects of praise or of criticism; and if in civil life and the avocations of peace, such characteristic awards of merit or demerit are less marked, they are not of less importance than in military life. Pre-eminent fitness and faithfulness in official station are the true and only conditions that will insure lasting honor to the incumbents of such stations, or satisfy the just demands of the people. Doubtless there were many aspirants for the honor of serving as Quartermasters-General in providing for Wellington's troops in the Peninsula, but some of those officials were placed in perpetual disgrace by their own inefficiency, when the Iron Duke, writing to General Vane, said:—"I wish I had it in my power to give you well clothed troops, *or to hang those who ought to have given them their clothing.*"

In the varied duties and responsibilities that fall to the lot of the medical profession in public life, the question of professional and individual *fitness* will inevitably be raised both in the profession and among the people affected by the official duties of the physicians occupying the stations of public responsibility. Our hospitals, medical schools, boards of health, and the organization and working of the army medical service, all and respectively bear their own unmistakable testimony to the necessity and the high obligation that rest alike upon the profession and the public to place the right men in the right places. And although it is true that the attainment of commanding or influential positions of official medical service in this country usually depends upon extraordinary personal effort directed by talent and energies worthy of reward, yet it must be confessed that the interests of the medical profession and the welfare of society would be greatly enhanced by the existence of a competent tribunal or system that should be equivalent in effect to that of *concours* in determining the relative and real status of all candidates for professional appointment or promotion. But for the present we can hope for no other or better tribunal than that constituted by the public sentiment and testimony of the profession itself. And this tribunal, though hitherto unorganized, may eventually find systematic and uniform modes of expression through the agency of the American Medical Association. Whatever system may eventually prevail among us for determining and thereby elevating the standards of qualification for public positions in the profession, we may hope that system will encourage and not repress honorable aspirations and efforts. There is, however, one branch of our profession that, from the very nature of its own peculiar relations to the national government, possesses the means of elevating and properly defining the views not only of the entire medical profession, but the ideas of the public at large, respecting the resources and spirit of our profession: we refer to the Army Medical Staff.

The columns of this journal have borne frequent and uniform testimony to the noble animus and beneficial influence of the Military Medical Staff upon the profession at large; and in the present eventful period, we may justly look to our devoted brethren in that staff for exhibitions of the noblest qualities and largest resources of medical men. Also, in respect of the humanity, zeal, and patriotism of that staff, much has justly been expected, but certainly not more than its leading members have already manifested; for what could exceed that excellent beginning of extra efforts for the health of the army by the acting Surgeon-General in calling upon the Secretary of War for the institution of a "Commission of Inquiry and Advice in respect of the Sanitary Interests of the United States' forces." Said SURGEON WOOD, in his letter of May 22d:—

"The sudden and large increase of the Army, more especially of the volunteer force, has called the attention of this office to the necessity of some modifications and changes in the system of organization, as connected with the hygiene and comforts of the soldiers; more particularly in relation to the class of men who, actuated by patriotism, have repaired with unexampled promptness to the defence of the institutions and laws of the country.

"The pressure upon the Medical Bureau has been very great and urgent; and though all the means at its disposal have been industriously used, much remains to be accomplished by directing the intelligent mind of the country to practical results connected with the comforts of the soldier by preventive and sanitary means.

"The Medical Bureau would, in my judgment, derive important and useful aid from the counsels and well directed efforts of an intelligent and scientific commission, to be styled, 'A Commission of Inquiry and Advice in respect of the Sanitary Interests of the United States Forces,' and acting in co-operation with the Bureau, in elaborating and applying such facts as might be elicited from the experience and more extended observation of those connected with armies, with reference to the diet and hygiene of troops, and the organization of military hospitals, etc."

What other department of the Government service has expressed such humane and patriotic solicitude, and what other Bureau has so fearlessly and effectually overstepped both precedent and prejudice, and from the beginning of the war demanded the best aid that could be rendered by the ablest talent in the country—civil as well as military. We are fully justified in asserting that the Army Staff, in that letter of Dr. R. C. WOOD, one of its noblest and most loyal representatives, and its then acting chief, has given a true index of the progressive and liberal spirit that animates its members; while the hearty co-operation of the military Medical Directors with the Sanitary Commission throughout the whole line of the army, proves that army surgeons are not guilty of the petty jealousies and narrow views that are supposed by some to be inseparable from military life.

Now the point to which we beg to direct attention is this: viz. "The necessity of some modifications and changes in the system of organization, as connected with the hygiene and comfort of the soldiers," as so candidly stated by the veteran Dr. WOOD.

The ordinary regimental and hospital duties of our army surgeons have been well performed; and although some improvements are needed, Congress and the War Department are responsible for their delay: in years gone by the Medical Bureau has repeatedly and in vain petitioned for them. But the fact stated in the letter above quoted presents a new and most important question: viz. "How shall sanitary measures be effectually applied in military encampments and hospitals?"

The ordinary service of the army surgeon is mainly *executive*, but here is an acknowledged necessity for a class of purely *administrative* and *inspectorial* labors, for which the existing organization of the Staff does not sufficiently provide. It is true that hitherto the inspectorial and administrative duties in military hospitals and camps have been combined with the ordinary executive duties of the surgeon, while only the bureau service of the Surgeon General's office at Washington has been exclusively administrative. But the experience of the Sanitary Commission, with its score of sanitary inspectors, has fully confirmed the statement of Dr. WOOD, that there is a necessity for some changes in the organization of the Army Medical Department, connected with the hygiene and comfort of the soldier.

We have noticed with much satisfaction that the Medical Bill now before Congress, provides that all the medical officers of the *administrative* branch of the staff are to be *selected* and appointed by the President, and approved by the Senate. Complaints have reached us that the eight or ten officers of that branch of the service might, and probably will be filled by others than the oldest members of the staff. Such might be the result; but we say, let it be so, if that is to be the inevitable result of honest efforts to put "the right man in the right place." But the fallacious and foolish idea, that the mere selection and appointment to such duties is to be regarded as a promotion or an elevation to really higher honors, ought not to be entertained. The true physician can have no more honorable duty than that of actual ministration to the sick and wounded. The best surgeon of the entire staff might be the very poorest Sanitary Inspector and administrative officer. Indeed, it is stated by SIR JAMES MCGREGOR that he found great difficulty in selecting suitable men for the inspectorial and administrative duties of his staff; but he believed in the principle, and carried out the practice of such selection. The large knowledge of human nature, the discreet and sound judgment, and the special culture and experience required to render a person fit for the duties that will be required of the few administrative officers under the proposed Medical Act, would seem to make it plainly a duty that they should be selected and appointed solely upon the ground of greatest fitness. And if we have correctly estimated the excellent qualities of head and of heart that have long characterized the senior members of our Army Staff, they will not be found in opposition to this feature of the proposed Act for reorganizing the Medical Department of the Army. Whatever may be the other features of that Bill, this must be regarded as a wise and just provision.

It being manifestly the first duty of the Government and of the Medical Staff to cause all the administrative offices of the Medical Department of the Army to be filled by those members of the corps who have the largest administrative talent and experience, for the sake of human life and the strength of the Forces, we need not be anxious first to determine whether this system of *selection* might not diminish some of the incentives to faithfulness that the old system of inevitable *succession* by seniority might encourage. The welfare of the entire army being the chief object of concern, such a query can have little weight. But then we

know that in our own, as in any other useful calling, the sure recognition of actual merit and fitness is an incentive equalled only by the power of conscience and the love of doing good. This question was thoroughly discussed and triumphantly settled by SIR SIDNEY HERBERT's Commission of Inquiry into the Regulations affecting the Sanitary Condition of the British Army; and now, by a Royal warrant, all the administrative offices of the British Staff are filled by selection, while the regimental and executive service continues very properly to be regulated upon the basis of promotion by seniority, subject to just exceptions in favor of unusually meritorious services and ability. In the French system, with its seven grades of rank above the *Médecins sous-aides*, the three highest ranks, viz. the seven *inspecteurs généraux*, and the eighty *Médecins principaux* in two classes—the promotion is *solely by selection;* while in the four next subordinate ranks, the promotions are about equally by selection and by seniority.

With such examples, and with the unanimous sentiment of the medical profession in civil life in favor of the principle of *selection*, let our enlightened brethren of the Army Staff see to it that the changes effected by the proposed Act be worthy of the spirit and claims of the profession, and adequate to the exigencies of the times. We believe that the principle of *selection and fitness* versus *succession by seniority*, will be recognised and approved by Congress; and upon the Army Staff itself rests the responsibility of having that principle wisely operative and justly limited and guided by the proper authorities and regulations. And as affording some practical suggestions as to the proper character of those regulations and the authorities concerned in the selection for the administrative branch of service, we will here quote from the recommendations officially reported in reference to this subject by the HERBERT Commission:—

"The first consideration must be *the efficiency* of the public service, and for this, as it appears to us, *selection* for the highest ranks and employments is *indispensable*. * * * In the two upper or inspectorial ranks we hold that the public interests require that promotion should go by selection of the ablest and most efficient officer; and, in recommending to the Commander-in-Chief, who is responsible for all promotions, the officer to be promoted, we are of opinion that the Director-General should always notify the *relative position of the officer in his rank, and the grounds on which the selection is made*. * * * These selections would, of course, be founded partly on personal observation, partly on the case books of the medical officers, partly on public reports and despatches, and partly on confidential reports made by the principal medical officer on each station, of the character and capabilities of the officers serving under him."

THE WEEK.

WE have received numerous responses from country practitioners heartily endorsing our appeal to the country to aid the friends of sanitary reform in this city, in obtaining the passage through our present Legislature of a Health Bill, and promising hearty co-operation. It appears that much of the small-pox now prevalent in this and adjacent States is directly traceable to New York. Dr. COPELAND, of Jefferson Co., N. Y., writes: "We have had small-pox here now for over eight weeks, and it is still spreading. I have also means of knowing that it came direct from the vicinity of New York city." Similar statements are made by physicians in Oneida, Westchester, Albany, and other counties. We hope our country friends will make their influence felt at Albany by petitions and letters. We append an outline of the Metropolitan Health Bill:

ABSTRACT OF "*An Act concerning the Public Health of the Counties of New York, Kings, and Richmond, and the waters thereof;*" *commonly called the* METROPOLITAN HEALTH BILL.

SEC. 1. Provides for the appointment, by the Governor and the Senate, of seven citizens of the district, three of whom shall be practising physicians, and who, with the Health Officer, the Mayors of New York and Brooklyn, and Chairman of the Supervisors of Richmond county, shall be called the METROPOLITAN BOARD OF HEALTH. The members first appointed shall serve from one to seven years, and one shall afterwards be appointed annually to serve seven years.

SEC. 2. The said Board of Health are given full power and authority to administer all the laws relating to the public health, interments, registration of births, marriages, and deaths; and also to determine and regulate the diseases and vessels subject to Quarantine, and the anchorage of infected vessels; also to enforce the laws prohibiting or regulating the sale of poisonous, adulterated, or unwholesome drugs, medicines, and food.

SEC. 3. Gives to the Board of Health the power to enforce the cleanliness of the streets and public places.

SEC. 4. Gives control of domiciliary nuisances, houses unfit for dwellings are prohibited, and landlords are required to keep their premises in proper condition, and penalties for neglect are prescribed.

SEC. 5. All institutions, supported wholly or in part at public expense, are required to make such reports to the Board of Health as may enable them to ascertain the sanitary condition of any part of the district. The appointed members of the Board are subject to removal in the same manner as sheriffs. "A practising physician of skill and experience" shall be appointed chief executive officer, and an Inspector of Health for the county of Kings, of like qualifications.

SECS. 6 and 7. Fix the emoluments of the appointed members of the Board, and mode of defraying the expenses incurred for the administration of the Act.

SECS. 8 and 9. Repeal all inconsistent laws, and direct the immediate organization of the Board of Health.

—

IN another column will be found a statement in regard to the sickness in GEN. LANDER's division, and the praiseworthy efforts of SURGEON SUCKLEY, the Medical Director, to effect needed reforms in the hospitals. There has been a large amount of sickness in this division, the diseases being mostly measles and its sequences, typhoid pneumonia, typhoid fever, etc. Under the rigid medical discipline which this officer will introduce we shall have reason to expect a marked reduction of mortality from this class of diseases.

—

THE New York Medical College will close its session on March 4th. The address on the occasion will be given by PROF. PERCY.

—

THE State of New York has a stringent law against the sale of poisons, but it did not prevent two accidents last week. The first was the poisoning of the prisoner Gordon by strychnine, introduced into his cell at the Tombs. In the second case a person is reported to have bought two ounces of strychnine of a respectable druggist, with which he very summarily disposed of his life.

Army-Medical Intelligence.

LIST OF THE NAMES OF SURGEONS AND ASSISTANT SURGEONS APPOINTED TO THE VOLUNTEER REGIMENTS OF THE STATE OF NEW YORK, SINCE JAN. 24, 1862, AND THE CHANGES WHICH HAVE OCCURRED IN THE REGIMENTS IN THE FIELD FROM THE SAME DATE.

Feb. 3, 1862.—Augustus Campbell, M.D., Surgeon 77th Regt., vice John L. Perry, resigned. Feb. 4.—James Wilson, M.D., Surgeon 79th Regt., vice Eli Samuel Ruggles, not reported for duty. Feb. 10.—William H. Rulison, M.D., Assist. Surgeon 15th Regt., vice Archibald F. Mudie, resigned Feb. 11.—Eldred P. Gray, M.D., Surgeon 4th Regt., Eagle Brigade, organizing at Buffalo.

CONDITION OF THE SICK AT CUMBERLAND.—A private letter from Cumberland gives us the following item:—"The number of sick in the city is particularly frightful. Every suitable building that is available is filled—some to their utmost capacity, and the cry is still they come. The suffering consequent on such a rapid increase of the number of sick has been great indeed. I am of the opinion that not a little of it is owing to the lack of system in the management heretofore of the hospitals, everything being in confusion. A new idea of things has taken place, under the management of Dr. Geo. Suckley, a young physician from Washington. He has been assigned the charge of the hospitals here, and he is an unusually skilful and intelligent surgeon. Owing to him and the ever kind and sacrificing ladies of the city, accommodations are getting into a better state."—*Wheeling (Va.) Intelligencer.*

[We append Surgeon Suckley's two first Special Orders. —ED. MED. TIMES.]

SPECIAL ORDER—No. 1.

MEDICAL DEPARTMENT, GENERAL HOSPITAL, CUMBERLAND, MD., Feb. 15, 1862.

Our crowded Hospitals are at any moment liable to destruction by fire. With inadequate means of prevention and of escape a frightful loss of life might occur.

To guard against such a calamity, I hereby direct all the Medical Officers to report forthwith to me what additional means of escape from the upper stories can be provided.

Wherever practicable, Hospitals merely separated by a partition wall will have doorways of escape from one building to another cut through the wall on each floor.

The purchase of 160 Water Buckets is ordered. These will be distributed to the different Hospitals, where the Medical Officers in charge will direct at least four to be placed on the floor of each story, in an accessible place. They will be kept filled with water at all times, and not to be used for any other purpose whatever A severe penalty will follow any infringement of this rule.

Each Medical Officer will draw up a set of Regulations for the conduct of Nurses and Patients in case of a fire alarm. These, as well as the present Order, to be conspicuously posted in each Hospital.

A Fire Alarm Drill is ordered daily in each Hospital Building.

GEORGE SUCKLEY, M.D.,
Brigade Surgeon and Medical Director.

SPECIAL ORDER—No. 2.

MEDICAL DEPARTMENT.

1. The Medical Director has noticed during his visits at the various Hospitals several patients in a dying condition, who seemed to have been allowed to run down with but little attempt on the part of the Medical Officers to sustain or revive by the judicious and free use of alcoholic stimulus.

2 Among our patients there are many who, although not absolutely suffering from typhoid *fever*, are nevertheless afflicted with disorders upon which the typhoid poison has made a decided impression.

3. It is desired that, in future, patients in a failing condition will be *stimulated and fed* before they get too low; and it is ORDERED *that no case be treated as hopeless until death has taken place.*

4. Stimulus and nourishment in many cases are our only wise medicaments. Food is our best tonic, stimulus gives temporary strength for its digestion. Medical officers practising in the General Hospitals at this Depot, are recommended to combine fluid food with stimulus whenever practicable. Egg-nog, milk punch, chicken broth, mixed with wine or spirits, are all far better than raw spirits and water, except when a rapid and sudden effect is desired.

5. Perhaps there is no better test of a Physician's ability than that afforded by his practice in the administration of stimulants. Nauseating, small spoonfuls frequently repeated, very soon become repulsive. Heroic doses at longer intervals are far better. For example: A small wine-glass of milk punch administered every fifteen or twenty minutes, scarcely stimulates and but feebly revives. The patient is incessantly annoyed by the attention and officiousness of his nurse; his rest is broken, and he soon becomes disgusted with the very smell of the mixture. On the contrary, a tumblerful, as near as practicable, given say once in two hours, rouses the whole nervous system; the pulse comes up, a short sleep is gained, the patient is nourished and refreshed.

6. Milk punch becoming distasteful, egg-nog may be substituted, or any other palatable nourishing stimulus.

7. In conclusion, it is not only desired (as in paragraph 3) but strongly advised, that the physicians here employed will stimulate and nourish their patients before they run down too low; and not, as is frequently the case, follow an obvious indication only when the suffering patient is at the last gasp—thus justifying the remark once made by an old hospital patient, that he "never had seen a doctor give a patient brandy unless he was sure to die!"

All requisitions for stimulus to a reasonable amount, made on the Medical Director, will be duly honored.

GEORGE SUCKLEY, M.D.,
Brigade Surgeon, Medical Director, Lander's Division.
GENERAL HOSPITAL, CUMBERLAND, Feb. 17, 1862.

HEALTH OF TROOPS IN MISSOURI.

SYRACUSE, MO., January 21, 1862.

[Army Correspondence of the AMERICAN MEDICAL TIMES.]

WE are still encamped in tents, and the health of our regiment very good, having recovered rapidly since our march from Springfield. During that trip we had over one hundred cases of measles, and nearly all were treated while being transported in Government wagons, and knocked about on the march. Out of one hundred and four cases ten died of measles and its consecutive diseases, pneumonia and dysentery; this is not a greater percentage than in the hospital at St. Louis, in which that disease is treated. I am perfectly satisfied if we could have had these cases in tents, we should not have lost any, but they were jolted in wagons (I do not mean ambulances), and exposed to all kinds of weather and hardships. Considering what they passed through it is most remarkable all did not perish.

I found the cooler the patient was kept, "if not cold," the less the eruption, and the less the eruption the quicker the convalescence. In those kept warmly covered the eruption would be profuse, and the patient very sick at the stomach, and greatly prostrated, and recovery was slow. I am fully convinced if all the cases of this disease were treated in tents, instead of warm houses, it would prove more beneficial and less destructive to life. During the month of December we had three quite sudden deaths, and all within three days; they presented some very unusual symptoms. The first two cases were treated in quarters, five days, for diarrhœa, with the usual remedies for that disease, and with varying success as to checking it for a time; but as they got no better I sent them to the hospital, as being more comfortable. Soon after going there they began to have a remitting type of fever; tongue became dry and red; subsultus; one had some tenderness over stomach and bowels, and the other none; pulse became very frequent, 120 to 160, feeble; and for two days before death could

not be felt at wrist. The mind was wandering for the last forty-eight hours.

I regarded the cases as remittent fever with diarrhœa, and taking on a typhoid character, and treated them on the supporting plan—whiskey, beef-tea, counter-irritation, anodynes to check bowels—but they died in five days after entering, and ten days from first attack. Post-mortem examination showed the mucous membrane of the bowels, from one end to the other, highly inflamed. Stomach red as beef, thickened, and contracted, and there was not an inch from the cardiac extremity of the stomach to the anus but what was in the same condition. Peyer's patches, which I supposed would be the seat of the difficulty, were thickened, but not ulcerated.

Here was something that typhoid never presented, and I concluded that these were cases of gastro-enteritis. What could be done for a disease running its course thus rapidly? I felt extremely anxious, for I had thirty cases following in their wake as rapidly as possible. I was satisfied that alcoholic stimulants must do injury to stomachs in that condition, and I discontinued it. The next day another man died, taken in the same way, followed by nearly the same class of symptoms, and was in hospital but five days. He had no tenderness over the stomach and bowels on hard pressure, no nausea, tympanites, petechiæ, or anything denoting the serious nature of the disease, except the small, weak pulse at first, and finally pulseless at the wrist; rather a pinched expression of countenance; tongue dry and red; subsultus; mind clear, until last twenty-four hours, then wandering. The autopsy showed exactly the same thing as the others, except that Peyer's plates were extensively ulcerated, and raised above the surface of the membrane an eighth of an inch, and large ulcers extended into the cæcum. All other organs in this and the other cases were healthy. But here seemed to be a case of genuine typhoid fever. What to do under such circumstances was a query to me; I was satisfied the old treatment of typhoid fever was useless, if not injurious here; indeed, nothing could do any good in such a state, but if anything was to be accomplished it must be early. I immediately changed my treatment in all the cases; went to cupping extensively over stomach and bowels, both wet and dry, whether there was tenderness or not; followed this with large blisters, and repeated, if necessary; I gave internally the following:—℞. Emul. gum. acaciæ ʒ iij.; terebinthini ʒ j.; olei ricini ℥ ss.; tr. opii ʒ iss; M. Tablespoonful every two hours, or until the effect of opiate was produced. This was given to all cases suffering from diarrhœa; if the case was not troubled with that I omitted the oil, and gave the other. If any further stimulant was required I gave carb. ammonia, but no alcohol. From the time this change in treatment was commenced every case began to improve, and in a short time the dry tongue and other unfavorable symptoms began to change for the better. All those cases recovered, and many others which came after; but on the 12th of this month a man was admitted into hospital who had previously said, if he ever got sick he would never go to hospital, and the orderly had allowed him to remain in quarters six days, idling about complaining. He was finally sent to hospital, and he informed me that he had suffered from diarrhœa the past three weeks, more or less; that he had been to the steward, and got medicine twice, which had relieved him; he had done duty up to within six days. He had a little fever of remitting character; pulse 140, very feeble; tongue dry and red; a little subsultus; intellect clear, but a peculiar pinched expression of countenance. From his appearance, and the previous history of the other three cases, I was satisfied nothing could be done for him. I put him on the same course as I had followed with so many others, but nothing benefited him; he lived but four days after coming under treatment, and but ten after he was taken ill. His mind was clear, up to within twenty-four hours of death. Stomach quiet; no pain or tenderness on pressure; no tympanites or petechiæ, and but moderate diarrhœa. For two days previous to death he was pulseless, and all the first symptoms continued. Once, the day before death, he vomited some blood and a little mucus; no vomiting except that. Post-mortem showed stomach red as beef, thickened and contracted duodenum, and about five feet of upper part of jejunum very red, and mucous membrane softened; then a short space not affected, but the lower portion was as bad as the upper. The ileum presented what I never saw before, and hope I may not see again. Every one of Peyer's glands was ulcerated to its fullest size, enormously raised and spread out like a full-blown rose, if I may use the expression. They would range from a five-cent-piece to the size of a dollar. Every mucous follicle and duct was thickened, raised, and ulcerated from the size of a pin's head to a pea. On passing through into the cæcum, at the junction of the ileum was an ulcer as large as a teacup. The whole mucous membrane to the rectum was in a frightful state of disorganization. Liver, kidneys, lungs, and heart, sound. I did not examine the brain, for I thought I had found enough. I suppose this is camp typhoid fever in its worst form, and nothing will save a patient when it has passed into that stage of disease; but by watching closely, after the diarrhœa, allowing no cases to pass without prompt attention, and following up vigorously the course I have indicated, I am satisfied most cases may be avoided. Many cases of remitting fever rapidly verge that way, but all as yet have yielded to that course properly carried out, though quinine frequently is demanded in the latter cases. The great difficulty I find is in distinguishing cases, and the only way I can do is to act as though all were of that nature; for thus far no symptoms indicate the serious character of the disease, until suddenly we find the patient with the frequent weak pulse, and peculiar expression of countenance, and then I conceive it too late to save him. The injury to the mucous membrane is too great to rally from, and death will follow. But why are all the symptoms of such a serious disease so obscure? how is it possible for such extensive disorganization to occur and no amount of pressure and punching will indicate it by expressions of pain? why are so many of the characteristic symptoms of typhoid fever absent, and yet it shows itself in the most virulent form? In old times, five or ten were required to get well under way, but here it proves fatal, unless checked. I think, by vigilance, and attending to sanitary arrangements about camp, etc., I shall avoid further loss. At present we have only 46 cases of all kinds under treatment, and 20 convalescing, which is very moderate. We have had three cases of variola, but as I have vaccinated the whole regiment twice over, I hope we may not have any more. There has been considerable sickness in the West among all the troops since our return from Springfield, but they are rapidly improving now. Yours, etc.,

CHARLES H. RAWSON,
Surgeon, Iowa 5th Regiment Vol.

MR. WHITE COOPER ON THE SIGHT AS AFFECTED BY RAILWAY TRAVELLING.—Daily experience convinces me of the injurious consequences to the eyesight which have followed the introduction of railway travelling, and with it the strong inducements to read whilst on the journey. In the majority of cases, the publications so read are cheap papers or books purchased at the station, printed in imperfect type on thin paper. Under the most favorable circumstances, there is on railways a vibration requiring incessant efforts on the part of the muscles and adjusting apparatus of the eyes to follow the shaking words, and in proportion as the carriages are ill-hung or the line rough are these efforts great. Many persons never can read in railway carriages; a sensation of swimming in the head speedily follows the attempt. There can be no doubt that the practice is fraught with danger; the effort is analogous to that made by the muscles of the body to maintain the equilibrium, whence proceeds much of the stiffness and fatigue inseparable from long journeys.—*Lancet.*

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 17th day of February to the 24th day of February, 1862.

Deaths.—Men, 105; women, 91; boys, 100; girls, 104—total, 400. Adults, 196; children, 204; males, 205; females, 195; colored, 8. Infants under two years of age, 125. Children reported of native parents, 22; foreign, 164.

Among the causes of death we notice:—Apoplexy, 8; Infantile convulsions, 30; croup, 11; diphtheria, 12; scarlet fever, 39; typhus and typhoid fevers, 11; cholera infantum, 0; cholera morbus, 0; consumption, 65; small-pox, 13; dropsy of head, 15; infantile marasmus, 13; diarrhœa and dysentery, 0; inflammation of brain, 12; of bowels, 10; of lungs, 23; bronchitis, 5; congestion of brain, 8; of lungs, 4; erysipelas, 4; whooping cough, 4; measles 2. 221 deaths occurred from acute disease, and 28 from violent causes. 283 were native, and 117 foreign; of whom 72 came from Ireland; 2 died in the Immigrant Institution, and 55 in the City Charities; of whom 11 were in the Bellevue Hospital.

Deaths for the Week ending February 25, 1861	.....	393
" " " " " 24, 1862	.....	400
" " " " " 17, 1862	.....	403

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Feb. 1862	Barometer. Mean height.	Barometer. Daily range.	Temperature. Mean	Temperature. Min.	Temperature. Max.	Difference of dry and wet bulb. Thrm. Mean	Difference of dry and wet bulb. Thrm. Max.	W ind.	Mean amount of cloud.	Humidity Saturation, 1000
	In.	In	°	°	°	°	°			
16th.	30 20	.21	23	17	30	5	8	N.W.	2	650
17th.	30.19	.24	27	23	30	2	3	N.E.	10	841
18th.	30.00	.17	34	27	40	4	7½	N. to S.W.	6	734
19th.	30 00	.30	35	31	40	2	4	N.E.	7	800
20th.	29.70	.89	32	24	38	4	7	N.W.	3	781
21st.	30 20	.30	28	23	34	5	7	W.	4	681
22d.	29.84	.40	36	30	42	3	6	W.	10	869

REMARKS.—16th, Clear A.M., variable P.M., hazy late at night. 17th, Hail and rain P.M. 18th, Light rain A.M., variable P.M., clear late. 19th, Hazy sunrise, variable A.M., snow storm commenced at 3 P.M., rain and lightning eveuing. Barometer fell four-fifths of an inch. 20th, Rain early A.M., afternoon variable, wind fresh early A.M. and P.M. 21st, Clear A.M., wind fresh, hazy at noon, variable afternoon, cloudy night. 22d, Very light rain A.M., variable noon, cloudy P.M.

MEDICAL DIARY OF THE WEEK.

Monday, March 3.	New York Hospital, Dr. Halsted, half-past 1 P.M. Bellevue Hospital, Dr. Thomas, half-past 1 P.M. Eye Infirmary, 12 M.
Tuesday, March 4.	New York Hospital, Dr. Parker, half-past 1 P.M. Bellevue Hospital, Dr. Loomis, half-past 1 P.M. Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
Wednesday, March 5.	New York Hospital, Dr. Cock, half-past 1 P.M. Bellevue Hospital, Dr. Sayre, Is. Hos., half-past 1 P.M. Eye Infirmary, 12 M. Academy of Medicine, half-past 7 P.M.
Thursday, March 6.	New York Hospital, Dr. Halsted, half-past 1 P.M. Bellevue Hospital, Dr. Elliot, half-past 1 P.M. Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
Friday, March 7.	New York Hospital, Dr. Parker, half-past 1 P.M. Bellevue Hospital, Dr. Flint, half-past 1 P.M. Eye Infirmary, 12 M. Dr. Noyes's Lecture, half-past 1 P.M.
Saturday, March 8.	New York Hospital, Dr. Cock, half-past 1 P.M. Bellevue Hospital, Dr. Wood's Clinic, 1 P.M. Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICES.

The Regular Monthly Meeting of the N. Y. Sanitary Association *will be held at 7½ P.M., Thursday, March 6th, at Room No.* 19, *Cooper Institute.*

At the last meeting, the following resolution was offered :—

"That, in the judgment of this Association, further State legislation is imperatively required to secure a more general and effective vaccination, but so framed as to avoid offensive compulsion if possible.

The above resolution will be taken up for discussion at the next meeting, immediately after the reading of the minutes.

Members of the medical profession are specially invited to attend.

New York County Medical Society.—*The Stated Monthly Meeting of this Society will be held at the College of Physicians and Surgeons, Fourth Avenue, corner Twenty-Third street, on Monday next, March 3d, at 7½ P.M. Papers on medical subjects and discussions expected.*

Commencement of the New York Medical College. —*The Commencement of the New York Medical College will be held on Tuesday, March 4th, at* 8 *P.M.* Prof. Percy *will deliver a valedictory address.*

New York Academy of Medicine.—*On Wednesday Evening, March 5th,* Dr. Nœggerath *will read a short paper "On Inversion of the Uterus;" after which,* Dr. I. E. Taylor *will read a paper "On the* Non-*Shortening of the Neck of the Uterus up to the Full Term of Pregnancy, illustrated with diagrams of the different views entertained on the subject."*

To Physicians.—Jerome C. Smith,

M.D., late of McLean Asylum, near Boston, is prepared to receive into his house, 107 East 39th St., a limited number of Epileptics or Nervous Invalids for care and treatment. He can give them superior accommodations, and command the services of the most approved nurses.

References.—D. Tilden Brown, M.D., Supt. Bloomingdale Asylum, Manhattanville, N. Y. Edward R. Chapin, M.D., Supt., Kings Co. Lunatic Asylum, Flatbush, L. I. Moses H. Ranney, M.D., Supt. N. Y. City Lunatic Asylum, Blackwell's Island. John E. Tyler, M.D., Supt. McLean Asylum, Somerville, Mass. Rev. Wm. Adams, D.D., No. 8 East 24th St.

Sent Free by Mail on Receipt of Price.

A Practical Treatise on Military Surgery.

By Frank Hastings Hamilton, M.D., author of a Treatise on Fractures and Dislocations, Surgeon-in-Chief to the Long Island College Hospital, Surgeon to the Bellevue Hospital, New York, Professor of Military Surgery and of Diseases and Accidents incident to Bones, in the Bellevue Hospital College. 8vo. Price, $2 00.

This work embraces a consideration of the Examination of Recruits, the Hygiene of Troops, relating to Diet, Dress, Exercise, &c.; Accommodation of Troops in Tents, Huts, Barracks, &c.; the Construction and Location of Hospitals; Preparations for the Field; Flying Ambulances, Litters, &c., also, Gunshot Wounds, Amputations, Hospital Gangrene, Scurvy, &c. United States Army Regulations, with many other matters pertaining to Military Surgery.

Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

On Diphtheria. By Edward Headlam Greenhow. 1861. Pp. 160. Price, $1.25.

Our readers will find a very large amount of information in the twelve chapters of which the volume is made up. Perhaps, in the present state of our knowledge on the subject of this obscurely understood disease, little more can be said beyond what may here be found written down.—*London Medical Times and Gazette.*

We have only been able here to refer to certain of the more prominent facts concerning diphtheria; but we believe we have said enough to recommend this well-written treatise to the attention of the profession.—*British Medical Journal.*

Baillière Brothers, 440 Broadway.

Sent Free by Mail on Receipt of Price.

Text-Book on General Physiology

for the use of schools.

A KNOWLEDGE OF LIVING THINGS WITH THE LAWS OF THEIR EXISTENCE. By A. N. Bell, A.M., M.D. One handsome volume of 318 pages, 12mo., illustrated by sixty wood engravings and two colored plates. Price One Dollar.

N.B.—The work was originally published at $1 50. It is *reduced in price* so that it may compete more favorably with other Text-Books.

Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Illustrated manual of Operative Surgery and Surgical Anatomy, by Drs. Bernard and Huette.

Edited with notes and additions, and adapted to the use of the American Medical Student, by Drs. W. H. Van Buren and C. E. Isaacs. Illustrated with Steel Engravings, from drawings after nature. 8vo. Colored Plates, $15.00.

Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Compendium of Human Histology.

—By C. Morel, Professor Agrégé à la Faculté de Medicine de Strasbourg. Illustrated by twenty-eight Plates. Translated and edited by W. H. Van Buren, Professor of General and Descriptive Anatomy in the University of New York: 1861. Pp. 207. Price, $3 00.

It is the best compendious treatise we have seen. The plates are admirable, some of them illustrating most beautifully the views of Virchow upon the office of the cell in the formation of tissues, both normal and pathological.—*Boston Medical and Surgical Journal.*

Baillière Brothers, 440 Broadway N. Y.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians* (*principally country Physicians*) *Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bonrbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseons eructations and gastric derangements, renders its continued employment often impossible. In Lebel's savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy*.

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyoscianus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.

By SAMUEL R. PERCY, M.D.,

PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE IV.—PART III.

IODINE AND ITS COMPOUNDS.

Let us now consider the various compounds of iodine; the most important of these is the

IODIDE OF POTASSIUM—POTASSII IODIDUM—formula KI.

There are many methods of preparing this salt; the following is, I think, the best. To a freshly prepared and cold solution of caustic potash, sp. gr. 1·33, dry iodine is gradually added with constant stirring, until the solution acquires a brownish yellow color. After being allowed to stand for some hours, the whole is poured into a porcelain dish and evaporated to dryness, then finely powdered and intimately mixed with one-twelfth its weight of powdered wood charcoal, and the mixture projected by spoonfuls into a red hot crucible; when the whole is thrown in, the heat is continued for ten minutes, and the contents then thrown into a clean open vessel. When cold, the salt is dissolved in hot water, filtered, and evaporated slowly to crystallization. The mother liquor is carefully drained off and again evaporated to crystallization. The last portions usually contain a small amount of carbonate of potash, to which alcohol is added, which dissolves out the iodide but leaves the carbonate of potash. The addition of the charcoal, and the application of heat, are to convert the iodate of potassa (KO, IO_5) into iodide of potassium (KI).

Iodide of potassium crystallizes in white cubes and octohedrons, which are without odor, and of a pungent, saline, and unpleasant bitter taste. It is necessary to keep them in a dry place, for they readily absorb water from the atmosphere, and become yellow and moist. It dissolves in three-quarters its weight of cold, and half its weight of hot water. It is very soluble in ether and alcohol.

Therapeutical Applications.—This preparation of iodine is more frequently used than any other, and iodine itself is seldom used unless it is in combination with this salt, as in the compound tincture and solution before referred to. It is milder in its action than iodine, and produces much less gastric disturbance; but if taken in full doses, the eructations and sense of heat in the stomach are quite unpleasant. As this salt is applicable in nearly all cases where iodine is required, and as we have given you the therapeutic action of iodine, it is unnecessary to repeat it here. The compound of iodine with iodide of potassium is asserted by some not to be a simple solution, but that the iodine is chemically combined with it, and is a definite chemical compound. A slow reaction is also said to take place between iodide of potassium and nitric ether, forming hydriodic ether and nitrate of potash; the decomposition may be thus expressed: $C_4H_5O, NO_5 + KI = C_4H_5I + KO, NO_5$. The medicinal effects in neither of these cases would be interfered with.

Iodide of Ammonium has been very highly recommended as superior to iodide of potassium in secondary syphilis. Dr. Gamberini, of Bologna, has written a monograph on this salt, and has pointed out the advantages it possesses in the treatment of syphilis over the other iodides. But other physicians have not found the advantages he claims, and its exceedingly deliquescent nature renders it inconvenient to use. Upon theoretical grounds, there would be no advantage in this salt.

Iodide of Starch was first recommended by Dr. A. Buchanan of Glasgow, as a means of administering large doses of iodine without irritating the stomach. It is prepared by rubbing twenty-four parts of starch powder with twenty-four parts of cold distilled water, and to this solution one part of iodine in twelve parts of alcohol is added. When well mixed it is washed with cold water, thrown on a filter, and water added till it runs off quite colorless. It is dried without heat, and kept in stoppered bottles. A soluble iodide of starch has been made by moderately roasting the starch, and thus converting it into dextrine, before it is mixed with the iodine. The soluble iodide of starch thus formed may be made into a syrup, which is of a splendid violet-blue color, and contains two and a half per cent. of soluble iodide of starch, and about quarter of one per cent. of iodine. The iodide of starch has been but very little used, although it seems to be much less irritating than some of the other preparations of iodine. It was at first given upon the theory that all the different preparations of free iodine united with the starchy materials of the food, and in the stomach were converted into iodide of starch; but this theory does not hold good. That the iodine is absorbed has been proved by the presence of iodine in the urine within a short time after it has been taken. A colorless iodide of starch was presented last year to the French Academy of Sciences by M. Duroy, who brings the iodide in contact with yeast, and thus deprives it of its color; in this state it is very soluble in water, insoluble in alcohol, sweet, gummy, and incapable of crystallization. The addition of yeast, then, would have some influence in the detection of iodine by starch.

You will remember that, in my lecture on iodide of iron, I told you that I had occasionally seen colored particles of iodide of starch pass with the fæces. You will not often see these colored particles, only in those cases where the food is undigested and passes rapidly through the intestines, for all the secretions of the body have the property of depriving the iodide of starch of its color. The saliva, the nasal and pulmonary mucus, the blood and the urine, when added to small quantities of iodide of starch, completely deprive it of color; the same decolorization also takes place if applied over an ulcer, and the sweat produces the same result. These are facts that are readily noticed by any observing person. But, in addition to these, Dalton has demonstrated to us that the gastric fluids decolorize the iodide of starch almost immediately upon contact with them, and that the iodine leaves the starch, enters into combination with the organic matter, is absorbed, passes through the circulation, and is discharged in combination with other substances in the urine. It was formerly a universal recommendation, it is at present very frequent, to administer iodine and its compounds at intervals between meals, fearing that it should combine with the starchy matters of the food, and thus become insoluble and inert. But we see by the experiments performed by Dalton that such directions are entirely unnecessary, as the starch, even if given in combination with the iodine, cannot retain it in combination in presence of the digestive fluids, unless the iodine is in great excess. The iodine unites, in some peculiar way, with these organic substances, leaving its combination with the starch; and that such union does not take place with an alkali presented in the fluids, but owing to some peculiar property of the organic substances themselves, is proved by the effect being equally produced by the acid secretions.

HYDRARGYRI IODIDUM, Hg_2I.

Proto-Iodide of Mercury.—Iodide of Mercury.—Mild Iodide of Mercury.—Green Iodide of Mercury.

Preparation.—The U. S. Dispensatory directs that one ounce of mercury and five drachms of iodine be rubbed together with a sufficient quantity of alcohol to form a soft paste, continuing the trituration until the globules disappear. It is then dried with gentle heat, and kept in well stoppered bottles in a dark place. The iodide prepared in this man-

ner frequently contains a considerable quantity of the biniodide of mercury (the preparation we will next speak of), and to remove this, a better method of preparation is required. By the following formula this compound may be obtained pure:—Eight parts of mercury are triturated in a porcelain mortar with five parts of iodine, to which a few drops of alcohol are added from time to time, and the trituration continued until the whole is converted into a dark yellowish green powder, and no traces of metallic mercury are visible even under a magnifying glass. The operation should be conducted in a moderately dark place, or the mortar should be covered with a cloth to exclude the light. Alcohol is now added by degrees, constantly triturating, until the whole is reduced to a thin paste, which may be thrown upon a filter in a dark place, and washed with alcohol until the alcohol which passes ceases to give a black precipitate or turbidness with sulphuret of ammonium. The whole may now be dried with a gentle heat, put into a closely stoppered bottle, and kept in a dark place. You will observe that this formula is, in substance, the same as the one above given, excepting that it directs the product to be washed with alcohol, which dissolves out any biniodide formed, as that substance is soluble in alcohol, whereas the iodide is insoluble.

The proto-iodide (or mild iodide) of mercury is a dark greenish yellow, tasteless, and odorless powder, insoluble in water and alcohol, wholly volatilized by heat. You will observe as I expose it to heat in this test-tube, it first becomes of a reddish color; as the heat is continued it becomes yellow; the iodine is now passing off, as you see by the violet-colored vapor, and the crystalline plates of iodine on this cold portion of the tube; the mercury, in metallic form, is deposited around the tube lower down.

HYDRARGYRI IODIDUM RUBRUM, HgI.

Hydrargyri Biniodidum.—Hydrargyri Periodidum.—Red Iodide of Mercury, Biniodide of Mercury.

Preparation.—Dissolve five parts of corrosive chloride of mercury in 100 parts of water, and add a solution of iodide of potassium, dissolved in ten times its weight of water, so long as a precipitate forms, taking care that an excess is not added. The amount of iodide of potassium required will depend upon its purity, but generally from six to seven parts. Collect the precipitate upon a filter, wash with distilled water, and dry with a gentle heat. It must be kept in a well-stoppered bottle in a dark place.

As thus prepared it is a brilliant scarlet powder, without taste or odor. As prepared by the Edinburgh process it is in crimson acicular crystals. Water dissolves but a mere trace of it. You see that both the powder and crystals are soluble in alcohol, in solutions of chloride of sodium, iodide of potassium, and mercurial salts, by which means it may be separated from red oxide of lead, cinnabar, and other adulterations. Heated in a test-tube you see it becomes yellow, fusing to a brownish yellow liquid, and now it is sublimed in the upper part of this tube in a yellow crystalline mass, which as it cools becomes gradually red. This change of color from yellow to red proves its dimorphous character, and is dependent upon its different crystalline form. This compound is frequently given in combination with iodide of potassium, the potassium salt being very largely in excess; but there is a definite formula for the preparation of the *Iodohydrargyrate of Potassium*, which we will give before we treat of the therapeutic action of these two last preparations.

Iodohydrargyrate of Potassium.—Dissolve three and a half grains of pure iodide of potassium in one ounce of distilled water, to which add four and a half grains of the red iodide of mercury. The dose is from two to five minims, containing from the thirtieth to the twelfth of a gram. This compound was recommended by Dr. Channing in 1834, but Boudorff had investigated its chemical character in 1826, and stated that it consisted of mercury acting as an acid, and iodide of potassium as a base. Such is not my opinion, but I give you the formula.

Uses of the Iodides of Mercury.—The mild iodide has been largely employed in the treatment of primary syphilis. Some have used it in preference to other forms of mercury, asserting that it is less liable to produce salivation; others, from its combination with iodine, that it more quickly causes absorption and removal of the syphilitic poison. But its most useful application is in the disease above mentioned, associated with scrofula. When pure, its action on the system very much resembles calomel, but it requires much more care in its administration. Even when freshly prepared, unless the precautions we mentioned to you are observed, it frequently contains more or less of the more powerful compound, the red iodide; even if perfectly pure when made, if it is subjected to light, or to damp atmosphere, a change takes place, whereby a portion is decomposed, and red iodide and metallic mercury formed. When made into pills and kept for a length of time, the same change frequently takes place. A change also is produced in it when combined with iodide of potassium. You should remember, then, in administering this agent that it is very liable to change, and may easily be converted into the red iodide. These two preparations bear much the same relations to each other that the two chlorides of mercury do. We are therefore enabled to understand why there has been so much difference of opinion respecting the effects of this mild iodide; some asserting that it is a powerful irritant poison in doses of one or two grains, and others contending that it may be safely administered in the same doses as calomel. The former class have undoubtedly used an impure article, containing red iodide, while the latter have used a pure article free from this impurity. If pure, it may be safely administered in doses from two to ten grains, but its exhibition in large doses is, in my opinion, seldom needed; for, if used, it is for its constitutional, not for its purgative effects, and this may be produced by doses of one grain better than by doses of ten grains. If the constitutional effects of the remedy are needed, one grain may be administered every two, four, or six hours, if necessary in combination with opium. Its most convenient form of administration is as follows:—Mix it with a small quantity of finely powdered sugar, place the whole upon the tongue, and take a swallow of water. It has been used in the form of ointment in skin diseases of a scrofulous character, and also as an unction to produce salivation; but it is liable to the same changes in the ointment that I have before mentioned, and therefore should be used with great caution.

The Red Iodide of Mercury is much more powerful in its action than the proto-iodide, and much resembles the corrosive chloride of mercury in its effects, and is used in the same class of diseases. It is generally administered internally in solution of iodide of potassium, and on this account is frequently given in cases of strumous syphilis. It has been much employed in the form of ointment in obstinate skin diseases, especially in lupus. When the ointment is applied to the skin, after a few applications it produces a feeling of heat and smarting which lasts for several hours, and leaves the skin reddened and irritated for some time. If the application is continued, the reddened surface is covered by a number of minute serous vesicles, which, when they dry up, have an epidermic crust. This treatment has been adopted with much benefit by some of the French physicians in acne, and in some of the more obstinate syphilitic skin diseases.

Arsenici Iodidum, AsI_3.—Iodide of arsenic is prepared by rubbing one part of arsenious acid with four parts of iodine to a very fine powder. The mixture is then put into a flask, and gentle heat applied until liquefaction occurs, and then poured out on a porcelain slab. The iodide of arsenic is an orange red crystalline solid, soluble in water, and volatilized by heat. Its principal use is in preparing the iodide of arsenic and mercury. It is not much employed in medicine, but is occasionally used in obstinate skin diseases, both internally and as an external application.

Liquor Arsenici et Hydrargyri Iodidi.—Solution of the Iodide of Arsenic.—Donovan's Solution.—Take of the iodide

of arsenic, red iodide of mercury, each thirty-five grains; distilled water half a pint. Rub the iodides with half a fluid ounce of the water, and when they have dissolved, add the remainder of the water, heat to the boiling point, and filter. (U. S.) This solution was introduced to the notice of the medical profession, by Dr. Donovan of Dublin, in a paper in the *Dublin Journal of Medical Sciences*, for Nov. 1839, though the formula above given is that recommended by Prof. Proctor. As thus made, it is of a pale yellow color, and styptic taste.

This solution has been much used as an alterative in the treatment of many of the obstinate forms of disease of the skin, as lupus, pityriasis, psoriasis, porrigo, impetigo, herpes, and lepra, and in both the papular and scaly eruptions of syphilitic character. The dose prescribed by Dr. Donovan is from five to twenty drops, three times a day, in water. It is incompatible with opium and its alkaloids. Doses of twenty minims contain one twenty-fourth of a grain of arsenious acid, about one-twelfth of a grain of deutoxide of mercury, and about one-fourth of a grain of iodine. In doses of twenty minims it is apt to create gastric disturbance, and if continued for many days will produce salivation; it is therefore better to administer it in smaller doses, especially as in many of the diseases in which it is used it is necessary to continue its use for some time. In the short time left to me I cannot dwell too long on any one article; I must therefore refer those of you who feel inclined to study this subject more deeply to the papers of Dr. Donovan, and that of Dr. I. E. Taylor, in the *Am. Jour. Med. Sciences*, v. 319.

Of the iodides of gold, iron, lead, manganese, silver, sulphur, and zinc, we have spoken when treating on these different metals.

Iodoform, C_2HI_3.—Dissolve two parts of carbonate of potash in five parts of water, in a long necked flask; to this solution add two parts of iodine and two parts of alcohol; place the flask in a hot water bath until the solution is colorless. When cool, the greater part of the iodoform crystallizes out, and the yellow scales are collected on a filter, washed with water, and dried, by pressing several times between folds of filtering paper. Iodoform forms yellow laminated scales, which are soft to the touch, and possess an odor resembling chloroform and iodine, or something like saffron; it has at first a peculiar sweetish taste, which soon becomes disagreeably strong of iodine: it volatilizes at the ordinary temperature of the air. Water dissolves about $\frac{1}{133}$ part. It is soluble in eighty parts of cold alcohol, and twelve of boiling alcohol. It is soluble in ether.

This substance has been used as an antiseptic and antimiasmatic. "Taken internally it produces all the effects of iodine, without any irritation, and has been given in doses ranging from one to seven grains. It has likewise been employed with asserted beneficial effect as an inhalation in diseases of the lungs, and externally in the form of suppositories and ointments."*

Original Communications.

ON CERTAIN OF THE ACCIDENTS WHICH MAY FOLLOW VACCINATION.

By HENRY M. LYMAN, M.D.,
HOUSE SURGEON TO BELLEVUE HOSPITAL.

(*Concluded from page* 121.)

We have seen how formidable are the consequences which may follow the use of vaccine lymph that is unhealthy, or that has undergone a process of putrefactive decomposition; the progress of our investigation will show that disturbances of a very similar character may occur, even though the lymph be of the most unexceptionable nature. It is well known that the inflammatory process is often affected by various atmospheric influences; there are epidemic seasons in the course of which no wound, however slight, can be induced to heal kindly; and it has been remarked that in certain conditions of the system, conditions which may be either congenital or accidental, inflammations are prone to become asthenic and uncontrollable. If, under such conditions, the simplest incision with a clean instrument will not heal without extensive suppuration, or even sloughing, what may we not reasonably anticipate as the consequence of a poisoned wound? In his learned essay on the variolæ vaccineæ, Mr. Ceely stated (*Trans. of the Provinc. Med. and Surg. Soc.*, vol. viii., p. 345) that he had often observed the *irritable vesicle* produced by the action of vaccine virus "in strumous or erysipelatous habits, with light and fair complexions, thin and florid irritable skins, and a flimsy cuticle incapable of concealing the network of plethoric capillaries beneath, and where the smallest puncture produces a torrent of blood, and the mildest lymph proves a destructive poison." It was, probably, in constitutions of this class that the unfortunate results occurred which were described by Dr. Vandervoort in the *N. Y. Journal of Medicine* (1846, p. 11), and by Mr. Dendy (*Lancet*, 1837–8, vol. ii., p. 152) at a meeting of the London Medical Society. Mr. D. affirmed that he had seen three cases in which death followed the inflammatory action resulting from vaccination. Two of these cases had been vaccinated by a Dr. Walker; and, having seen several of that gentleman's patients "with the blood flowing in a perfect stream from the arm after vaccination," and having remarked that an "erythematous inflammation" often followed in such cases, Mr. D. was of the opinion that when good Dr. Walker was pressed for time he was apt to vaccinate "most slovenly!" Dr. Vandervoort's patient was a child, of an apparently healthy constitution, which had been vaccinated three or four days previously, with a view to arrest the whooping-cough. Hæmorrhage had occurred at the point of vaccination, and was much increased during the paroxysms of coughing. This continued for three weeks, and the child died in a state of perfect anæmia.

Referring to his experiments with vaccine lymph removed from the cow, Mr. Ceely continues (p. 349):—"It too often happens, especially in subjects with thin and vascular skins, that the vesicles burst, or are easily broken, during the height or about the decline of the areola; and if the subject be of a strumous or erysipelatous diathesis, of full habit, and possess an irritable skin, secondary inflammation is set up and becomes more diffused and deeper seated, the corium is destroyed completely, and a slough of the subjacent tissue is soon manifest; the surrounding integuments are deeply indurated, often a multitude of ecthymatous pustules are formed on the enlarged papillæ and on other parts of the skin, and abscesses in the cellular membrane and axillary glands ensue, causing proportional constitutional irritation." He adds (p. 416): "Spontaneous bursting did not often occur, excepting in those subjects possessing the before mentioned and well known obnoxious constitutional and dermic characteristics, *upon whom we must always use active lymph with some risk.*"

As the result of his studies, Mr. Ceely maintains that persons with a thick, smooth, clear skin, and a dark, healthy complexion, present vaccine vesicles which are least liable to accidental rupture, and are, consequently, less exposed to the risk of secondary inflammation.*

That peculiar atmospheric conditions have a tendency to provoke the occurrence of erysipelas is well illustrated by the first four observations recorded in the accompanying table. Vaccination was only the exciting cause of an unhealthy inflammation, to which every individual was, for the time being, predisposed. Mr. Chartres found this predisposition so strongly marked among the soldiers of the regiment to which he was attached that it became necessary to avoid every surgical operation, and even the punishment of flogging was suspended, on account of the erysipelatous inflammation which occurred whenever the cutaneous surface was injured.

* Parrish.

* See also Dr. Carpenter's very interesting remarks on the predisposing causes of inflammation and disease. — *Principles of Human Physiology*, pp. 287-8, and p. 850.

TABLE OF CASES ILLUSTRATING SOME OF THE UNFORTUNATE CONSEQUENCES OF VACCINATION.

Record of Observations.	Reporter.	Age and Sex.	Date of Vaccination.	Result of Vaccination.	Duration of Symptoms.	Remarks.
I. Med and Phys. Journal, vol. xix., p. 408.	Dublin Cow-pock Institution.	Young children.	November, 1807.	Irregular vesiculation in many cases, with a tendency to ulceration after the seventh or eighth day.		This unhealthy tendency declared itself only in those cases which were vaccinated during the month of November.
II. Med. and Phys. Journal, vol. ii., p. 312.	Mr. Evans.		May and June.	During the prevalence of a long northeast wind, in May, there was much tendency to troublesome ulceration at the points of vaccination.		The same tendency declared itself in persons who were at the same time inoculated for small-pox.
III. Am. Journal of the Med. Sciences, vol. xx. p. 318, *et seq.*	Dr. Jackson.	Infant, 6 mos. old.	Winter, 1849–50.	Erysipelas appeared on the seventh day, extending over the whole upper extremity; an abscess formed in the axilla.	One month.	The winter and spring of 1849–50 were marked, in the vicinity of Boston (where these cases were observed), by the occurrence of a peculiar tendency to erysipelatous forms of inflammation. Small-pox was also unusually prevalent during the same season.
	"	"An old man."	"	The whole forearm became erysipelatous, but recovered speedily. The patient was an intemperate person.	A few days.	
	Dr. Cabot.	Male, 69 y'rs old.	"	Erysipelas appeared, the second day, and extended widely over the whole body, attended with profuse suppuration.	Two months.	
	Dr. Bigelow.	Male, 30 y'rs old.	"	Erysipelas appeared, the third day, extending rapidly over the greater part of the body, with typhoid symptoms and extensive sloughing upon the arm.	Two months.	
	"	Infant, 5 mos. old.	"	Erysipelas the ninth day, extending over the whole body, resulting fatally in a few days. Persons vaccinated from this arm, the eighth day, had perfect vesicles, without bad symptoms.	A few days.	
	Dr. Homans.	Male, 3 weeks old.	"	Erysipelas, the tenth day, involving the whole body; sloughing of the scrotum; abscesses formed at different points. Lymph taken from this arm, the eighth day, was in every case successful.	Three months.	
	Dr. Putnam.	Infant.	"	Erysipelas attacked the scalp, the fourth day; no other unfavorable symptoms appeared.	One week.	
	Dr. Channing.	Infant.	"	Erysipelas affecting arm, shoulder, and pectoral muscles. Child died "of obscure disease within the chest."		
IV. Dublin Medical Press, April 25, 1860.	Mr. Chartres.	Male, 18 y'rs old.	Oct. 10, 1859.	Erysipelas, the second day, followed by sloughing and hæmorrhage, necessitating amputation of the arm, forty-six days after vaccination.		An epidemic tendency to unhealthy inflammation was noticed in all the cases under observation at this time in the hospital.
V. Med. and Phys. Journal, vol. v., p. 162.	Mr. Maddock.	Infant, 6 mos. old.	Oct. 22, 1800.	Erysipelas, the ninth day, extending over the whole body, and terminating fatally on the twenty-sixth day after vaccination.	Seventeen days.	No apparent cause of abnormal symptoms.
	"	Infant.	Oct. 27, 1800.	Erysipelas, the ninth day, at the point of vaccination on the left arm. Two children vaccinated from this child's *right* arm, the ninth day, presented healthy vesicles, without unfavorable sequences.	Six weeks.	" " " "
VI. Med. and Phys. Journal, vol. vi., p. 131.	Mr. Clutterbuck.	Female, 7 w'ks old.	May 12, 1801.	Erysipelas, the ninth day, creeping gradually over the whole body, followed by anasarca of the lower extremities, terminating fatally	About four weeks.	This was a healthy child, vaccinated with healthy lymph.
VII. Ibid. vol. vi., p. 423.	Dr. Barry.	Female, 5 mos. old.	January.	Erysipelas, the twelfth day, extending over the body, followed by anasarca and abscesses.	Two months.	
VIII. N. Y. Med. Times, Nov. 1853, p. 43.	Dr. A. K. Gardner.	Male, 5 w'ks old.	Autumn, 1854.	Erysipelas, extending over the whole body, followed by sloughing of scrotum, formation of abscesses, etc.	Seven or eight months.	
IX. Boston Med. and Surgical Journal, Feb. 4, 1858.	Dr. Buck.	Infant.	March, 1857.	Erysipelas, the tenth day, extending rapidly and terminating fatally the eighteenth day after vaccination.	Eight days.	There were no other cases of erysipelas, nor any predisposition to that disease in the families to which these children belonged.
	"	Infant.	June 4, 1857.	Erysipelas the sixteenth day. Children vaccinated with matter taken the seventh and eighth day from these two cases, passed safely through the whole course of the vaccine disease.	One week.	
X. Am. Jour. of the Medical Sciences, vol. xx., p. 321.	Dr. Greene.	Male, 66 y'rs old.	January, 1846.	Pain and swelling the second day; erysipelas the seventh day, extending over arm and chest, terminating fatally, a little more than eight days from time of vaccination.	A few days.	
XI. Ibid. vol. xx., p. 96.	Dr. Buckingham.	Male, 25 y'rs old.	Aug. 28, 1849.	Febrile movement the fourth day; pain and swelling of right leg on eighth day, followed by similar successive symptoms in various parts of the body, terminating in a typhoid condition and death.	Three weeks.	The brother of this patient, vaccinated at the same time, with the same lymph, experienced no unusual consequences.

Of the cases recorded in this table, the greater number were children; of the six adults, two were between sixty and seventy years of age, one was described as "an old man," one was thirty, one was twenty-five, the sixth was eighteen years old. Of the seven children whose ages were mentioned, two were six months old, two were five months, one was seven weeks, one was five weeks, one was three weeks. The other cases were all young children. Seven cases proved fatal, being attacked with erysipelas on the ninth day in three instances, on the tenth day in one, on the eighth day in one, on the seventh day (preceded by pain and inflammation from the second day) in one, and in one case the time of the attack was not specified. Of the sixteen cases in which the date of the erysipelatous invasion was noticed, it occurred the second day after vaccination in two cases, the third day in two, the fourth day in two, the seventh day in one, the eighth day in one, the ninth day in four, the tenth day in two, the twelfth day in one, and as late as the sixteenth day in one individual. The children vaccinated at the Dublin Cowpock Institution in the month of November, 1807, manifested a tendency to ulceration of the pustule after the seventh or eighth day. Dr. Doepp, Physician to the Children's Hospital at St. Petersburgh, remarked (*Lancet*, 1836–7, vol. i., p. 851) that in a majority of the children who developed erysipelas after vaccination, the disease did not appear till the eighth, ninth, or tenth day, at which time, it will be remembered, the inflammatory process has reached the pyogenic stage, and seems most liable to unhealthy exacerbation. Of the twelve observations in which the season of the year was mentioned, two were made during the month of January, one in March, two in May, one in June, one in September, two in October, one in November; the cases observed by the Boston physicians occurred during the months of winter and spring; Dr. Gardner's case occurred in the autumn or winter; so that, excluding Mr. Evans' cases, which happened during the prevalence of a cold north-east wind in the month of May, only three unfavorably complicated cases were observed during the warmer half of the year.

A further consideration of this table indicates the improbability of the communication of erysipelas through the medium of vaccine lymph. Dr. Bigelow successfully vaccinated a number of persons with eighth day lymph from the arm of a child who, the next day, was attacked with erysipelas, which soon destroyed its life. Dr. Buck experienced no bad result from the use of lymph taken from the arm of a child who was afterwards attacked with erysipelas on the sixteenth day after vaccination. Dr. Homans was equally successful with lymph taken only two days before the appearance of erysipelas; and still more remarkable was the experience of Dr. Maddock, who successfully vaccinated two children with ninth day lymph from a vesicle upon the *right* arm of a child who at that very moment was developing erysipelas at a point of vaccination upon its left arm. It is, however, worthy of note, in this connexion, that Dr. J. L. Smith, of this city (*Am. Med. Times*, vol. ii., p. 401), has seen erysipelas occur in children who had been vaccinated with a scab which was formed upon a vaccine vesicle that had "passed through the usual stages, and presented the usual appearances," upon the arm of a child who suffered with diphtheritic inflammation of the throat during the course of the vaccine disease to which she was subjected. Two of these children presented symptoms of erysipelas within twenty-four hours after vaccination, but as the other cases were not attacked before the seventh day, it still remains a question whether the occurrence of the disease depended upon the character of the lymph which was employed, or whether it was excited by other causes more occult in their nature.

The age of the patient is a condition which exercises a certain degree of influence over the development of erysipelas after vaccination. Dr. Doepp found that the number of cases of post-vaccine erysipelas in the Children's Hospital was considerably diminished by deferring the time of vaccination from the seventh or eighth day after birth till the fourteenth day. A paper, contributed by Dr. Deslandes to the pages of the *Am. Medical Times* (vol. iii., p. 325), indicates a similar experience on the part of members of the Société Medicale des Hôpitaux de Paris.

It sometimes happens that the normal progress of the vaccine disease is disturbed by violence to the vesicle.* The results in such cases are usually in proportion to the injury, and in accordance with the constitution of the sufferer.

It has also been thought that the practice of making numerous punctures in vaccination has a tendency to produce excessive inflammation of the parts. Mr. Rees (*Lancet*, 1837, vol. i., p. 115) declared that he had seen "four infants destroyed by sloughing produced" in this manner; and at a recent meeting of the Obstetrical Society of London (*British Med. Journ.*, Dec. 5th, 1860, p. 985) Mr. Druitt exhibited two colored drawings, showing the effects of vaccination by scratching all over with ivory points a surface measuring one inch by three quarters: this whole surface had sloughed, leaving an enormous cicatrix. M. Legroux (*Am. Med. Times*, vol. iii., p. 326) finds that since he has made "only one puncture in each arm, he has never seen any accident which might be imputed to vaccination."

There has been much discussion regarding the degeneracy of vaccine virus. Some teachers maintain that it loses much of its protective power by transmission through a long series of individuals, while others claim that virus which has been traced in its course from person to person for a period of sixty years, is now as efficacious as when it was first employed. This is a question which cannot very easily be determined; but it is certain that the disturbances, produced by the use of a virus which has been newly derived from the cow, are generally much more marked than the effects which follow the use of a more perfectly *humanized* lymph. Vaccination was first practised in Hanover, A.D. 1799, by Mr. Stromeyer, with vaccine virus which had been sent from London by Dr. Pearson, and also with virus sent from Gloucester by Dr. Jenner. Stromeyer recorded his experience (*Med. and Phys. Journ.*, vol. iii., p. 471) in the following language:—"The London matter produces, frequently, an eruption of small pimples, but they disappear within a day or two at furthest. The Gloucester matter has never produced this effect here, but it frequently occasioned ulcerations of the inoculated part, of a tedious and long duration, which the former matter never did." From the writings of Dr. Jenner, we learn that the lymph which he was then accustomed to distribute was fresh lymph—often not more than three or four removes from the cow—because, residing at that time in a small country town, he found it difficult to preserve a supply of lymph without resorting to the cow. Drs. Woodville and Pearson, in their publications on the subject of vaccination, both testified to the diminished severity of inflammatory symptoms in proportion as the exciting cause became by successive transmissions removed from its original source. Mr. Estlin's experiments with new vaccine lymph (*Med. Gazette*, New Series, vol. iii., pp. 115, 709), show that the use of such virus produces more constitutional disturbance, deeper ulceration of the pustules, more extended inflammation—even in several cases producing axillary abscesses—and more general cutaneous affections

* In the *Med. and Phys. Journal* (vol. xvi., p. 323) is recorded the history of a child, vaccinated by an ignorant person, who, on the eighth day, picked the vesicle in several places, totally removed the cuticle from its surface, and "wiped it out" with a rag, causing the part to bleed. On the tenth day the inflamed areola was as large as a crown piece. Extensive erysipelas followed, and it was several weeks before the child recovered. Mr Smart (*Med. and Phys. Journal*, vol. xvii., p. 156) states that he vaccinated a healthy child, four months old, and that on the fifth or sixth day the vesicle was violently squeezed and broken. On the seventh day the arm was much inflamed. Erysipelas gradually extended over the arm and body, and the child died on the twenty-ninth day. The *Lancet*, Sept. 15, 1860, details the case of a woman thirty-five years old, a hospital patient, who had been vaccinated early in March, 1860. The vaccine vesicle was well developed, but when it had scabbed over she received a violent blow upon the arm, which was followed by severe inflammation. Abscesses formed in various parts of the body; the patient sank, and died the 28d of April. Vaccination was certainly not in fault in this case.

than occurs after the employment of ordinary virus. The observations of Mr. Ceeley (*Trans. of Provinc. Med. and Surg. Society*, vol. viii.) are to the same effect. He goes so far (p. 350) as to recommend a course of treatment preliminary to the vaccination of persons of an objectionable diathesis—a course similar to that in vogue with the small-pox inoculators of former days—"for," he adds, "it is a long time before some individuals can be safely vaccinated with this active lymph, even though taken from the mildest vesicle."*

The practical conclusions which may be drawn from the preceding observations are so apparent that they scarcely need a formal statement. That the lymph used in vaccination must be pure and in a state of perfect preservation, may be considered self-evident. The scab should never be used when liquid lymph can be procured from perfect vesicles in which the stage of pyogenic inflammation has not been reached, for the composition of every scab is, necessarily, more or less affected by the processes of pyogenesis. The subjects from whom lymph is derived, must be healthy and free from syphilitic taint. The virus should be used when fresh from the generative vesicle, or, if that be impossible, it must be preserved in such a manner that heat and moisture can have no effect upon its organization. If a virus thus elaborated be introduced into the circulation of a healthy individual, sufficiently advanced in age, during salubrious weather, at a season when epidemic influences are unknown, the vaccine disease may be expected to pass through its normal course, occasioning no great constitutional or local disturbance: when such disturbances do arise, it will not often be found difficult to trace them to one or more of the causes which have been set forth in the preceding pages.

CIRRHOSIS OF THE LIVER;

ENLARGED SPLEEN, AND ABNORMAL DISTRIBUTION OF THE VESSELS BETWEEN IT AND THE STOMACH.

By M. M. MARSH, M.D.
MONTPELIER, VT.

The motive to report this case, is not so much on account of the character, extent, or termination of the disease, as the unusual anatomical connexion which existed between the spleen and stomach.

The patient, J. S., aged twenty, had, for the last three years, been engaged in literary pursuits; was highly intelligent, and uncommonly active. His habits were strictly temperate; countenance animated and florid; and though frail in form, he was in the possession of uniformly good health, with the exception of a slight chronic diarrhœa, dating from a mild typhoid fever, two years previous. For a few weeks previous to his death, he had not exhibited his usual vivacity, which was, however, ascribed to the undue mental labor his duties as teacher imposed.

On Tuesday, Jan. 28th, I was called to see him. About eighteen hours previous, he had been engaged in violent athletic exercise, and soon thereafter vomited blood freely, and again within the hour. He was then removed to his home, and all the blood afterwards vomited carefully preserved. Appropriate means were employed to arrest the hæmorrhage: a horizontal position, external warmth, ice to mitigate the excessive thirst, and the exhibition of gallic acid, and other remedies. All, however, seemed unavailing to control the attacks, which regularly returned about every second hour, and without any previous sickness at the stomach. Instantly he would turn his head to one side (for from the first he was prostrate and unable to rise or converse), and then would flow from the mouth, and without much effort, from a pint to a pint and a half of unmixed florid blood. Nearly eighteen hours after the attack I was called, vomiting having occurred seven or eight times. I found him but partially conscious of objects; no radial, and but slight axillary pulsation; and presenting the appearance of one from whom life has just departed. In turning him to inspect the chest and abdomen, he again vomited nearly one pint of florid blood. The physical examination revealed, simply, an enlarged spleen. As he swallowed readily, thirty minims spts. terebinth. were ordered, in a solution of starch, every half hour, and until taken five times. In the interim vomiting recurred once, and ceased altogether: and, as was supposed, from the supply failing, and not from the agencies employed to arrest it. An enema, containing tannic acid, was ordered to prevent further exhaustion from evacuation of the bowels. After a few hours a very feeble pulsation returned to the wrist; he appeared to comprehend circumstances, but manifested no desire, except for drinks, as his thirst was intolerable. He continued in this semi-lifeless condition from Thursday to Sunday afternoon; with the lower limbs apparently destitute of circulation, and cold except from external warmth; the pulse at the wrist at times scarcely perceptible; and except when tormented by thirst, presenting more the appearance of the cadaver than the living subject. On the evening of Sunday, the bowels were suddenly and copiously evacuated, and the motion was repeated within twenty minutes without the apparent consciousness of the patient. The evacuations consisted almost entirely of coagulated blood. Between two and three hours from the first evacuation, the patient looking anxiously towards a wash-bowl, it was passed, and he vomited nearly a pint and a half of pure florid blood, and shortly expired.

I ought to have stated that after the cessation of vomiting, the serous portion was nearly all poured from the vessel in which the separate quantities of blood had been preserved (except at the two times which occurred before he was taken to his home), and the remaining portion of blood carefully measured, amounting to *nine pints and* f. ʒ iv.

An autopsy was held twelve hours subsequently. The head was not opened. The lungs normal. The heart, in size, consistence, and aspect, natural. Its right side empty: the left ventricle containing nearly ʒ iv. of material resembling finely comminuted coffee grounds. The ascending aorta normal, but its descending portion near the diaphragm began gradually to expand: so that near the splenic artery its diameter was at least one-fourth greater than at the superior thoracic portion. The aorta, throughout its whole extent, but especially the portion between the diaphragm and splenic artery, was softened. It could be torn by the fingers, but under the microscope presented no atheromatous deposit. The intestines, except the lower third of the duodenum, which was too much softened to admit removal, were healthy. The bladder exhibited its usual appearance: also the right kidney; the left simply hypertrophied, otherwise normal. The liver bilobed, and so completely cirrhosed, that within, or on its surface, not three lines of normal structure anywhere were seen between its nodules. The circulation throughout the liver appears to have been nearly obstructed: and still the gall-bladder was filled with apparently healthy bile. This viscus was less than the natural size; its weight three pounds and seven ounces. The splenic artery so dilated that the thumb is readily admitted. One-fourth its length, from its distribution, it sent a branch to an exact duplicate spleen, about the size of the healthy organ, which was suspended from the upper and larger spleen by membrane, as the liver is suspended from the diaphragm. The weight of the superior spleen was fifty-eight ounces; healthy in appearance, and sending, in the place of the usual distribution, two parallel vessels to the stomach, each with a diameter equal to the enlarged splenic artery, and readily admitting the thumb, and apparently penetrating the coats of the stomach. These vessels were so softened that a dissection of them could not be made; but on opening the stomach (which in all respects appeared healthy) opposite the connexion of

* See also the history (*Lancet*, 1838-9, vol. ii., p. 689) of a child, six months old, vaccinated with lymph which had been recently obtained from the cow. The progress of the vesicle was very rapid, and was attended with great inflammation, which continued for a fortnight before terminating in a slough.

these vessels with that organ, its mucous and a portion of its muscular coats were ruptured, which on being washed exhibited torn muscular fibre, for more than one inch in extent, and entirely between the connexion of these vessels with the stomach; its peritoneal coat was entire.

These were the conditions a careful dissection presented. The case furnishes points of remarkable interest. 1st, During life the liver presented no evidence of diseased structure or function; 2d, Softening of a portion of the arterial system, without observable fatty degeneration; 3d, Though the spleen varies very much in form and size, I have not noticed any record of absolutely duplicate spleen; and 4th, The very unusual (and as far as my knowledge extends) unknown fact of two immense vessels in place of the vasa brevia.

There are other points of perhaps minor interest. During the autopsy, no blood, and scarcely any liquid was observed. The blood previously lost, and which must have represented nearly the amount of circulating fluid at any one time, could not have been less than thirteen pounds, including that portion discharged subsequently from the bowels. The patient weighed 126 pounds.

The question arises, Why this regularity in vomiting? and whence the blood? If from the two vessels mentioned, acting as conduits, what was their distribution relative to the different coats of the stomach, and the anatomical condition of their extremities previous to the fatal attack? And in what consisted the immediate lesion leading to the fatal issue?

Reports of Hospitals.

NEW YORK HOSPITAL.

INJURIES OF THE HEAD.

THEIR NATURE AND TREATMENT, WITH ILLUSTRATIVE CASES,

By D. B. St. John Roosa, M.D., and James L. Little, M.D.,
Resident Surgeons.

(*Continued from page* 124.)

FRACTURE OF THE BASE OF THE SKULL.

I.—Mike Walk, æt. 30, Ireland, laborer, admitted July 13, 1861. (Dr. Peters, attending surgeon.) Patient was brought into the hospital, having received his injuries in an unknown manner. He was insensible, pupils contracted; there was stertorous breathing, and hæmorrhage from the ear. All attempts to bring on reaction proved unsuccessful, and four hours after admission he died. No autopsy was permitted by the coroner.

II.—Ellen Hickey, æt. 50, Ireland, admitted July 15, 1861. (Dr. Peters, attending surgeon.) Patient fell out of a fourth story window, and was immediately brought to the hospital. *Symptoms.*—Profound stupor, stertorous breathing, surface cold, pulseless at the wrist, bleeding from the left ear. On examination an extensive fracture of the skull, involving the frontal, temporal, parietal, and occipital bones, and probably extending to the base, was found. Patient continued in this condition without rallying for about twenty-four hours, when she died. No autopsy was allowed.

III.—Bridget McCarthy, æt. 50, Ireland, widow, admitted Aug. 1, 1861. (Dr. Parker, attending surgeon.) Patient fell down stairs, sustaining a compound fracture of the left radius near its lower extremity; wound small, and on inner side of bone. She was also suffering from concussion, and hæmorrhage from the right ear. Patient rallied after the injury. There was slight oozing of blood from the ear for three or four days, which gradually gave place to a thin, yellowish fluid. This discharge was for the first ten days quite free, amounting to from ℥ss. to ℥j. per diem, as near as could be judged. About ten days after, the muscles of the right side of the face became paralysed, the tongue in protrusion being drawn to the opposite side. Patient complained of but little pain in the head; the hearing of the right ear was destroyed. The fracture of the radius was treated in the usual manner; and although there was considerable suppuration about the wound, yet it did well, and patient was discharged seven weeks after the accident, union being pretty firm. The paralysis of face continued. This paticut was seen three months after the injury; she complained of dizziness and pain in the head; she had suffered from this ever since her discharge.

Remarks.—The above case presented all the symptoms of fracture of the base of the skull: 1. The bleeding from the ear at time of injury. This of course by itself cannot be considered as a sign of much importance, but, when followed by 2. A discharge of a thin, watery fluid, it is considered by authors as pathognomonic of this kind of fracture, and these, when associated with paralysis of the fifth pair of nerves, seem to me conclusive evidences of fracture involving the petrous portion of the temporal bone. This is the only case of recovery which has occurred during a long period, in which the hæmorrhage from the ear gave place to a serous discharge. Robert states that all cases in which this symptom is present, "invariably terminate fatally." Erichsen, however, states that he has seen several cases recover in which this symptom was present—one a patient fifty-eight years of age.

GUN-SHOT WOUNDS OF THE HEAD.

I.—A boy, æt. 17, admitted Nov. 10, 1861 (Dr. Watson), was shot by a pistol loaded with slugs, contents entering face and head, the assailant about six feet distant. Seen about one hour after, not suffering markedly from shock. A wound found the size of a three-cent-piece situated an inch above the external canthus of right eye; another about same size a little to the right of the median line in forehead; two others in the face. Symptoms of compression supervened twenty-four hours after. Water dressings had been the treatment up to this time: the first wound was then enlarged, also the fracture of the bones by the rongeur, and slug removed where it was pressing on the dura mater. The second ball was found to have penetrated the brain, and was not followed. Symptoms were only alleviated for a time, and the patient died seven days after in a comatose condition. Post-mortem showed considerable encephalitis, and a slug buried in an abscess of the middle lobe of the left side; effusion in ventricles considerable; other organs healthy.

II.—A man, æt. 21, was admitted on the 6th of April (Dr. Markoe). While sitting at a table was shot by an assailant, who stood about six feet from him. One hour after there was no shock, and pulse was a little frequent. The wound, contused and of the size of a pea, was in frontal region, two inches from inner canthus of right eye, in a direction immediately upwards. The ball was found flattened against the bone, and as large as a sixpence; it was removed, and water dressings applied; no fracture detected. On the next day had a slight attack of erysipelas of the face, which lasted for three days; in other respects did well; suppuration moderate; pulse ranged from 64 to 76. Four days after began to complain of pain in his head, supra-orbital. Pain disappeared in three days, he having been cupped and purged. Pulse from 64 to 72. Ten days after had a slight chill; two more on the next day, and pulse ran up to 104; no pain in the head; cough appeared eleven days after admission; chills continued once or twice in twenty-four hours; takes quinine and stimulants; pulse about 120. These chills inaugurated pneumonia. Patient's strength failed him; intellect was unobscured within a few hours of death. Died on the nineteenth day. Post-mortem showed a fissured fracture about one and three-quarters inch in length. A slight septum of healthy brain substance intervened between external wound and an abscess containing ℥ij. of pus. No communication between fracture and abscess. Dura mater at that point disorganized; no other lesion of brain. Both lungs were inflamed.

III.—A man, æt. 21, Ireland, admitted Jan. 1, 1862 (Dr. Watson), was shot by a pistol in the hands of an

assailant, supposed to have been eight or ten feet distant. As found three-quarters of an hour after, was semi-conscious, surface cool; pupils sluggish and equal; pulse hurried and weak. There was a lacerated wound on superciliary ridge about two inches from median line; eye closed, eyeball intact, lid œdematous; a minute opening also found in the skull leading to cerebral cavity. Water dressings. Patient survived nine days, being semi-comatose until the 6th, when convulsions occurred; pulse became accelerated, having been about 60 from morning after injury; skin hot; was freely purged from the beginning; had no hemiplegia; coma became more profound, and he died.

Post-Mortem.—Purulent matter beneath external opening in fibres of temporal muscle; small slugs; fracture of frontal bone just beneath the wound circular, and about one-eighth of an inch in diameter; considerable meningitis and encephalitis; a cavity in anterior lobe of right hemisphere, about one and a quarter inch in depth, irregular edges, free from purulent matter or false membrane; clot of blood in each lateral ventricle; small slug in cerebral substance just above right lateral ventricle. Other organs healthy.

(*To be Continued.*)

Reports of Societies.

SURGICAL SECTION.

STATED MEETING, Jan. 24, 1862.

DR. JAMES R. WOOD, CHAIRMAN.

DISCUSSION OF DR. GEO. K. SMITH'S PAPER ON THE RELATION OF THE INSERTION OF THE CAPSULAR LIGAMENT OF THE HIP-JOINT TO INTRA-CAPSULAR FRACTURE.

(*Continued from page* 126.)

PROF. POST states, that in order to demonstrate the truth of my fifth proposition, "it would be necessary to present a series of preparations taken from patients who had survived intra-capsular fractures for variable but known periods, antecedent to union, and to show that there was a progressive shortening of the neck before the occurrence of union." It appears to me that it would be almost impossible to obtain such a series of preparations, since they must be procured immediately after union, else Prof. Post would claim that this shortening of the neck by absorption did not occur till after the fragments were united. They cannot be obtained till after the death of the patient, and it will seldom happen that a patient, whose vital powers are sufficient to secure bony union of a fracture of the femur, will die immediately after union has occurred. Again, if it were possible to procure such a series of preparations, they would not be likely to illustrate "a progressive absorption of the neck," since the whole of the neck is, in some cases, removed in a few weeks or months, while in other cases as many years will elapse with a portion of the neck still remaining. The following extract from Mr. Howship's report of "cases of fracture of the neck of the femur,"* will exhibit this fact: "1. Age seventy-six, lived three weeks after the fracture, neck shortened half an inch, no union. 2. Age seventy-five, lived two months after the fracture, neck shortened three-quarters of an inch, slight fibrous union. 3. Age seventy-eight, lived five months after the fracture, neck still undergoing absorption. 4. Age sixty-six, lived five months after the fracture, the neck completely removed by absorption; firm fibrous union. 5. Age seventy-nine, lived ten months after the fracture, neck nearly absorbed, with no attempt at union. 6. Age seventy-nine, lived twenty-two months after the fracture, neck entirely gone, no union. 7. Age seventy, lived eight years after the fracture, neck nearly absorbed, firm fibrous union. 8. Age fifty, lived fourteen years after the fracture, neck about half removed by absorption, the fragments not united."

In the last case the patient was not as old by many years as either of the patients mentioned in the preceding cases, and this fact would suggest a more abundant nutrition of the fragments, which accounts, to a great degree, for the slower progress of their absorption. Since the last meeting of the Section I received a letter from Dr. Asa Horr of Dubuque, Iowa, informing me that he had lately obtained a specimen of fracture of the neck of the femur. He gave a brief history of the case, with a description of the specimen, and said, that, if I should "regard the specimen as of any value to science," he would forward it to me on receipt of my reply. Through his kindness I am enabled to exhibit the specimen this evening. It is from a patient fifty-eight years of age, who died a little more than a year after the occurrence of the fracture. The fragments were not united. I have macerated the specimen, and you will observe that all of that portion of the neck attached to the head of the bone has been removed by absorption, while a portion of the neck, about half an inch in length, still remains attached to the shaft. The specimen is interesting as a further illustration of the fact, that absorption after fracture of the neck does not proceed with any regularity, a given distance in a given length of time, but generally progresses with greatest rapidity in patients who suffer from this fracture at an advanced period of life, when the elements of nutrition are very imperfectly supplied.

It appears to me that the opinion of Prof. Post that "the union takes place in the first instance, and that the interstitial absorption is a subsequent event," is one which necessarily involves the disastrous consequence of disunion of the fragments, as one of the first results of such absorption; since parts newly formed are more readily attacked by absorption than those of longer standing; and we must therefore expect that the callus by which the fragments were united will be first attacked, and that its absorption will result in disunion, long before the whole of the neck shall have been removed. The following is interesting as an illustration of this point. "The callus is subject to *softening*, disintegration, and absorption, if not also to the fatty degeneration. . . . Occasionally the absorption can be distinctly traced to the inordinate use of mercury, carried to profuse salivation; or it may be owing to a syphilitic taint of the system, especially when this affection has reached its third stage, in which the bones and periosteum are so constantly, and often so seriously involved. But the most common cause, perhaps, of all, is an impoverished and diseased state of the blood, from the use of improper food, and especially from the want of a sufficient quantity of fresh vegetables and subacid fruits. The influence of ill health arising from this cause upon the condition of the callus, was strikingly exemplified in Lord Anson's voyage to the Pacific Ocean, in which many of the crew suffered severely from scurvy. It was noticed that those who had formerly had fractures were attacked with absorption of the callus, speedily terminating in disunion of the ends of the broken bone. Cicatrices, whether the result of the healing of wounds or of ulcers, experienced a similar fate, the parts breaking out into open sores, remarkably pale, languid, flabby, and difficult of cure. Similar effects are occasionally observed to follow attacks of typhoid fever and anæmic states of the system, however engendered."*

Prof. Post further states:—"The sixth proposition seems to me to involve errors, or at least unsustained hypotheses, more glaring than that which is objected to in the fifth proposition. The language which is employed by Dr. Smith in the sixth proposition, seems to convey the idea that the main obstacle to bony union in intra-capsular fracture is to be found in the condition of the fragment connected with the shaft of the bone, and that when the portion of the neck between the fracture and the shaft has been absorbed, the obstacle to bony union is thus removed." I confess that I am unable to see how the above inference can fairly be drawn from the language used. The following is the sixth proposition:—Under favorable circumstances fractures of the neck of the femur, external to the capsule, unite rea-

* Medico-Chirurgical Review (New Series), vol. xxiv., p. 102.

* Gross's System of Surgery, 1st edition, vol. ii., p. 145.

dily by bone; so also do fractures which are partly within and partly without the capsule, and it is highly probable that fractures within the capsule, which are followed by absorption, are sometimes united by bone, after the process of absorption has reached a point external to the normal capsule where bony material is supplied; but this, if it ever does occur, can never be proven; for if the line of union be partly without the normal capsule, it is impossible to determine that the fracture was entirely within it, and we can never be positive that bony union of intra-capsular fracture has occurred, until a specimen is presented in which the line of union is found to be entirely included by the normal capsule.

It is well known that bony union is of frequent occurrence in fractures external to the capsular ligament; but it appears to me that we are yet without positive proof that bony union has ever taken place entirely within the normal capsule. Numerous specimens have been exhibited as illustrations of such union, but in the great majority of these specimens the line of union is found to be within the capsule on the anterior surface of the neck, and external to the capsule on its posterior surface, with a portion of the neck still remaining attached to the shaft. Prof. Mussey's cases are examples of this kind, and Prof. Parker's specimens illustrate the same point. These specimens represent, without doubt, one or the other of two conditions; there has been either bony union of a fracture partly within and partly without the capsule, in which the shortening was mainly at the expense of the fragment attached to the head; or, bony union of the fracture which occurred entirely within the capsule, in which a union did not take place until absorption had reached a point which was external to the insertion of the capsule on the posterior surface of the neck; and it is impossible to determine the class to which either of the given specimens may belong. The posterior insertion of the capsule is usually near the middle of the neck, and a transverse fracture a little external to this point will be within the capsule on the anterior surface of the neck, and without the capsule on its posterior surface. It is plainly indicated in the sixth proposition that such a fracture is, under favorable circumstances, sometimes united by bone; also that a fracture at any point between this line and the shaft of the bone is united in like manner, and we are at a loss, therefore, to determine how it is that, "The language which is employed in the sixth proposition seems to convey the idea that the main obstacle to bony union in intra-capsular fracture is to be found in the condition of the fragment connected with the shaft of the bone, and that when the portion of the neck between the fracture and the shaft has been absorbed, the obstacle to bony union is thus removed."

Prof. Post states: "I conceive the principal obstacles to bony union in intra-capsular fractures to be found in the condition of the fragment connected with the head, which having no supply of blood-vessels except those which are conveyed to it by the ligamentum teres, does not receive sufficient nourishment to secure its union by bone with the other fragment."

Many reasons have been given for the constant failure of bony union within the capsule, but it appears to me that none have been given which are altogether satisfactory. It is true that there is a want of due nutrition of the fragments in patients who meet with this fracture at an advanced period of life; but we find the same failure to unite within the capsule, if a patient is the subject of this fracture in youth or middle age. In old age the function of nutrition is but imperfectly performed, and the weiglit of the body is, in consequence, gradually diminished by absorption, each of the different tissues being more or less affected by the slow decay; and it has been noticed that, for some reason which has not yet been fully explained, the neck of the femur is more seriously affected by this process than other parts of the skeleton. In this fact we see the reason why a fracture of the neck of the femur which is the result of a severe injury, and is of the rarest occurrence in youth, is frequently met with in old age, and often as the result of a most trivial injury. This atrophy or absorption of the neck is then the exciting cause of the fracture, and its progress after the fracture is seldom, if ever, arrested until a great part or even the whole of the neck has been removed. Malgaigne holds that the destructive absorption of the neck, which follows a fracture within the capsule, is incompatible with bony union. After a careful examination of the reports of post-mortem examinations of fractures within the capsule, it appears to me that the materials provided by nature for the uniting callus in this situation are in many cases entirely removed by absorption, leaving no appearance of an attempt at union; and that in those cases in which the callus is not thus removed, it is arrested in its development, forming in some instances a kind of semi-cartilaginous material, rounding off the extremities of the fragments, and in others, a firm fibrous union which does not become fully developed into bone. Sir Astley Cooper states that in recent cases the capsule is found to be distended "with a mixture of serum, synovial fluid, and blood, which is produced by the inflammatory process, and becomes absorbed when the irritation in the part subsides. I do not know the exact period at which this change takes place, but I have seen it in the recent state of the injury."*

With regard to the new classification of fractures of the neck proposed by Prof. Post, it seems to me that it will render the "vexed question of osseous union within the capsule," more difficult of solution than it will be with the classification now in use. He proposes "to make a new classification of fractures of the cervix femoris, dividing them into two classes, viz. fractures between the caput femoris and the inter-trochanteric lines, and fractures at the inter-trochanteric lines extending more or less into the shaft of the bone. I propose to call the fractures of the first class *intra-cervical*, and those of the second class *extra-cervical*. I think that these two classes of fractures will be found to correspond very nearly with those which have hitherto been described as intra-capsular and extra-capsular."

He divides "*fractures of the cervix* into two classes;" but the class of intra-cervical fractures, representing fractures at any point between the head of the bone and the inter-trochanteric lines, includes all possible fractures of the cervix, and hence his extra-cervical fractures cannot properly be spoken of as fractures of the cervix, and do not therefore correspond in any degree with fractures hitherto described as extra-capsular, in which the line of fracture traverses the portion of the cervix included between the insertion of the capsule and the inter-trochanteric lines. The greatest objection to the classification is found in the fact that an *intra-cervical* fracture, which Professor Post thinks will be found to correspond very nearly with an *intra-capsular* fracture, may be either an *intra-capsular* fracture, an *extra-capsular* fracture, or a fracture partly within and partly without the capsule. This fact is important when we consider that these several fractures included under the name of *intra-cervical*, differ widely from each other, bony union being of frequent occurrence in a fracture external to the capsule, occasionally seen in a fracture partly within and partly without the capsule, while it has not yet been satisfactorily demonstrated that bony union has ever occurred entirely within the capsule. It is highly important, both in a scientific and a medico-legal point of view, to know whether we can ever expect bony union of a fracture entirely within the capsule. If not, the surgeon who faithfully performs his duty, and fails to secure bony union of this fracture, can summon to his defence, when unjustly arraigned for malpractice, the scientific fact that a fracture within the capsule is never united by bone. Professor Post states that "in intra-cervical fractures bony union very rarely occurs," and he tells us that an intra-cervical fracture will be found to correspond very nearly with an intra-capsular fracture. If from this we are to

* Cooper on Dislocations and Fractures of the Joints, p. 145.

understand that bony union of an intra-capsular fracture does occasionally occur, we think that he requires us to admit as a *fact* that which surgeons have labored for fifty or a hundred years and failed to prove. I do not deny the possibility of bony union within the capsule, but simply think that the evidence furnished in proof of such union is not sufficient to establish it as a fact, and that further investigation is needed in this direction.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

ON THE IMMEDIATE TREATMENT OF STRICTURE OF THE URETHRA.

The London *Med. Times and Gazette* contains an article on this subject by Mr. Holt of the Westminster Hospital, in which he describes a method of treatment for the immediate dilatation and cure of stricture. The unsatisfactory nature of the prevailing methods of treating this complaint, and the tediousness of ordinary dilatation, and the certainty of a return of the stricture, induced him to adopt a more energetic mode of treatment, and about seven years ago he brought to the notice of the profession a new "stricture dilator," by means of which dilatation was effected by graduated tubes passed between the blades of the instrument. This method being attended more or less by "stricture fever," he at length determined to split the stricture by passing the largest sized tube at once, thus enabling the urethra to receive its full sized catheter. The instrument he now describes "consists of two grooved blades fixed in a divided handle, and containing between them a wire welded to their points, and on this wire a tube (which, when introduced between the blades, corresponds to the natural capacity of the urethra), is quickly passed, and thus ruptures or splits the obstruction." This forcible distension affects only the morbid obstruction, leaving the healthy portion of the canal undisturbed; hence, we have none of those serious complications which often accompany other modes of treatment. After the operation the water is drawn off, and the patient left for an interval of two days before the catheter is again used, when one of the same diameter as that used at the time of the operation is again passed, and its use continued, at first on alternate days, and afterwards at longer intervals. He reports a number of interesting cases, from which he states the following conclusions:—"1. The operation is of the most simple kind, and any one who can pass a bougie through a difficult stricture is competent to perform it. 2. It is not attended with hæmorrhage, infiltration of urine, abscess, or any serious local mischief. 3. In a majority of instances the relief is immediate. 4. The occurrence of rigors or any other constitutional disturbance is very rare, and the patient is seldom confined to bed longer than from twelve to twenty-four hours. 5. The urethra is immediately made permeable by a catheter of full size, which may be ever afterwards passed at discretion. 6. This method is available in every kind of stricture where a canula of any size can reach the bladder. 7. When the after treatment is judicious and attentive, the full capacity of the passage is always maintained. 8. In all cases of neglected treatment the stricture yields to this method more promptly than to any other. 9. It being impossible that any but the diseased tissue can be divided, the splitting of the stricture has a decided advantage over any cutting operation. 10. And to sum up the great advantages in one proposition, the process is facile, speedy, prompt in effects, and free from every danger, immediate or remote. The course of general treatment will naturally vary, according to the kind of obstruction, the number of strictures, and the occasional complications of contracted bladder, enlarged prostate, fistulæ in perinæo, false passage," etc.

Christopher Heath, Esq., surgeon to the West London Hospital, etc., reports in the *Lancet* some cases of stricture treated by this method. The first case reported presented a very dense cartilaginous stricture through which with considerable difficulty he introduced No. 00 silver catheter (two sizes smaller than the ordinary No. 1). Another stricture was found at the bulb which gave some trouble; but this was also overcome, the instrument entered the bladder, and was tied in. The size of the instrument was increased each day until No. 4 was passed, when the patient being brought under the influence of chloroform, Mr. Holt's dilator (small size) was passed into the bladder, and No. 4 tube introduced. This being withdrawn, he was enabled to pass the full sized dilator while closed, and introduce No. 10 tube, which required some considerable force, owing to the density of the stricture. The dilator being withdrawn, a No. 10 silver catheter was readily passed, the bladder evacuated, the instrument withdrawn, and the patient ordered to take half a drachm of tincture of opium. Since then he had no trouble in passing No. 10, and the patient continued to improve until a fresh gonorrhœa again brought him under the surgeon's care. At this time there was no stricture. In the other cases reported, much the same course was pursued. The writer thinks that this rapid and effectual method of treating the stricture has not attracted that attention in the profession which the exceedingly favorable results would justify.

THE APPLICATION OF LEECHES IN THE TREATMENT OF UTERINE INFLAMMATION.

Dr. Tilt advocates (*Lancet*) the application of leeches directly to the inflamed part, by means of the speculum, as more likely to reduce the characteristic phenomena of inflammation, than the method recently advocated by Becquerel, who prefers their application to the thighs, or venesection. Dr. T. says: "By applying leeches to the womb, we either seek—1st. To reduce inflammation. 2d. To reduce congestion, and promote absorption. 3d. To increase congestion, and determine menstruation." Each of these effects is obtained in some proportion to the number of leeches employed. To relieve inflammation we should apply a sufficient number, otherwise we shall congest, rather than relieve the womb. The number should also correspond to the size of the speculum, for if they have not sufficient room some will not only refuse to bite, but will interfere with those that have taken. He never applies more than four large ones through a moderate-sized speculum, more than six by a large, and more than two by a small one. If a small speculum is used, he advises small leeches, as the loss of blood depends less on the size of the leeches than on the number of leech bites. As an emmenagogue, leeches should be applied in a small number—two or three—when the menstruation is due, and repeated every month. We thus determine the blood current, and teach the womb to resume a forgotten habit. He does not apply leeches in those cases of inflammation of the neck constituted by uterine catarrh, but would advise them in deep-seated ulceration on a hard or soft hypertrophic basis, where seven or eight leeches may be applied and repeated several times just before or after menstruation. In internal metritis, which he believes is a much more frequent disease than is supposed, and forms the pathological condition in many cases of dysmenorrhœa, he advises to leech the womb, just before, and, if necessary, just after, the menstrual flow, the practitioner determining the number suitable to each case, being guided more by the inflammatory nature of the complaint than by the strength of the patient. He has sometimes found the best effects to follow this course, even in weak and anæmic patients. In hæmatocele or hæmatic collections of blood in the pelvis, he agrees with Dr. Bernutz, that the reabsorption is greatly promoted by two or three applications at three or four days' interval, and also at the first sign of menstruation. He considers them contra-indicated by very acute inflammation, and when the vagina is inflamed so as to make a digital examination painful. In these cases, he first applies leeches to the inner part of the thighs, and orders emollient injections to the vagina, which will soon reduce the inflammation sufficiently to allow the

application of leeches. They should not be applied in cancerous or syphilitic affections of the womb, for fear each leech bite should become an ulcer. The same may be said of those cases in which the inflammation is characterized by the production of diphtherial membranes.

It is well to state here that in the summary of Dr. Tilts' article on uterine exfoliation, published on page 41, ninth line from bottom, an error in punctuation renders the meaning of a sentence obscure. It should read—"with the external use of mercurial ointment and extract of belladonna, and the iodide of potassium to be taken in a compound infusion of gentian."

American Medical Times.

SATURDAY, MARCH 8, 1862.

A CAUSE OF PROFESSIONAL IGNORANCE.

Often in reported cases mention is made of an "intelligent practitioner" who was called in an emergency, or was in some other way brought in contact with the patient. This term, now so often used as expressive of the qualifications of a particular physician, has more significance attached to it than one would at first be prepared to admit. Not every physician who claims the title has the right to the appellation of an intelligent one. This humiliating statement, we are sorry to say, can be corroborated by instances in every particular medical community. The existence of this class can be accounted for in a very great degree by the defective preliminary education so commonly met with among our students of medicine, rendering them altogether unfit for the proper elucidation of those abstruse points with which the science of the healing art abounds. Besides this, we have another very fruitful source of incompetency and ignorance, in the want of sufficiently rigid examinations by many of our medical colleges. The ordeal of the "Green room" is too often passed by the unqualified student without difficulty, and the physician, thus prematurely made and titled by law, claims what he considers his rightful rank. To these points, however, the attention of the profession has been frequently enough called, and no one doubts the necessity of a thorough reform in the whole matter of medical education. So much for the foundation which the profession has to work upon.

We wish at this time, in connexion with the subject under consideration, to consider a very fruitful source of ignorance in our profession, and one which is important as applying equally to the educated and the illiterate, and that has reference to the want of a habit of systematic reading. It is indeed surprising to find how few physicians are given to reading anything that treats of medical subjects; even those who have every seeming facility for improvement, in the shape of good libraries, scarcely ever have a disposition to look further into a new book than the heads of its chapters. In reference to the amount of reading done in the medical world, we may, for the sake of convenience, divide the profession into three general classes, giving a type of each.

Firstly, then, we notice the physician who has cultivated habits of study, and who is every spare moment with his books. His practice may be large, and his professional engagements numerous, yet he always finds time to spend with his favorite authors, and read with interest and profit his periodicals. Such men study because they have a passion for it; because they know its necessity, and because they are sure of its rewards. How we may well blush to own that we have too few of such among us.

Again, there is a class by no means small who have a disposition to study, but who are always finding something else of pressing importance to engage their attention. This habit of indolence, easily got into, is hard to shake off, and the victim becomes a constant prey to a knowledge of his ignorance on the one hand, and a desire for reputation on the other. These are not, however, wholly lost to their sense of duty, but are only thoroughly aroused when an emergeney occurs in the shape of an important case. The book is then taken from the shelf, and the desired chapter is found. The result of the necessarily hurried reading is to render "confusion worse confounded;" a consultation ensues, and the chance for a reputation may probably be lost to him for ever. Can such a practitioner be unacquainted with the reason of his ignorance?

We will allude to still another class, who ignore reading almost altogether, and make it a practice to rely upon their general knowledge. The principles of medicine which were taught them during the time they attended medical lectures, they are content to spend a lifetime in putting in practice. Examples of such are frequently met with who for more than a quarter of a century have, as far as the acquirement of the knowledge of the science of their profession is concerned, made not the slightest advance. Were we to recite the many facts which have come to our knowledge as proofs of the ignorance of such men, we would be scarcely believed; and yet very many of them enjoy large practices, and their patients believe that they are receiving the benefits which all the recent improvements made in science can give them. It is impossible to conceive how anything short of the merest luck can in the great majority of instances shield such from disgrace, while in their important cases we are forced to admit that they succeed as did the man who when asked upon a certain occasion how he sent a bullet through the centre of a target, replied, "By shutting both my eyes."

We cannot lose sight of the fact that the habit of careful reading must be practised to a greater extent among medical men than it seems to be. No profession should embody more learning than does that of medicine, and the physician who neglects to improve opportunities for acquiring necessary knowledge is in the highest degree culpable.

The question of time is an excuse, which is perhaps oftenest urged against the proper prosecution of study—and with some show of reason. The uncertain calling of a physician no doubt interferes in a very great measure with his plans for self-improvement; a creature of emergency, he can call no time truly his own; but we will venture to say that even among the busiest spare moments can always be found. The very class of cases which are the most destructive of time, the tedious labors, afford not unfrequently golden opportunities for study to him who prepares himself for it by a book in his pocket. It is said with a good deal of truth that busiest men have generally the most time, and no one need search very long in any community to find a case in point.

In large cities there is comparatively less reading among medical men generally than in small towns, the reason for

which can easily be given by reference to the fact that consultations can be called at the shortest notice in the former places. The want of self-reliance is felt much more in the cities of New York, Philadelphia, and Boston, on account of the easy access which all have afforded to men in every speciality, than in the back woods of civilization, where the unassuming country doctor can consult with no one but through his books. Had the city physician half the energy which is possessed by his country cousin, he could, on account of greater facilities, lay claim with good grace to superior qualifications. Surprise has often been expressed at the intelligence of some country physicians, but the trouble is not taken to inquire into the reason for it.

The question naturally comes up here, what shall we read? The answer is, standard works and medical periodicals. We have previously taken occasion to allude to the importance of the latter publications to all engaged in active practice. Standard works appear only at certain periods, while the office of the medical journal is essentially to keep the professioual public informed upon every advance in science that has been made in the iuterval. We have no hesitation in saying that very many lives have been saved by a timely knowledge of a new and valuable mode of treatment, and we imagine that no prejudice against medical journals can offer an excuse for a neglect of duty to the patient.

In conclusion, we must once more urge this necessity upon all those who are not addicted to a habit of study—to set about earnestly to cultivate it, as a duty to themselves, their patients, and their profession. Scientific knowledge is within the reach of the humblest aspirant to medical honors, if he only have energy sufficient to put forth the requisite amount of untiring labor to obtain it. When every facility is afforded for improvement, indolence is the only excuse for ignorance. Let all those who are complaining of want of time, set about seriously to consider how very many opportunities they have allowed to slip by unnoticed. To those who are repentant of past indolence and are acting in accordance with their sense of duty, we would promise a rich reward; the habitual student, however, stands in need of no encouragement.

THE WEEK.

We alluded last week to the neglect of the law regulating the sale of poisons, and on further investigation we conclude that its inefficiency is not due to any defect in the law itself, but to the fact that there is either no one appointed to take cognizance of its violation, or that the proper officers are inattentive to their duty. The penalty for the sale of a poison by an apothecary without complying with the requirements of the law, is a fine of fifty dollars; but as in most cases the purchaser is the only one cognizant of the offence of the vender, no complaint is made, and hence no prosecution laid. But in such cases as those mentioned by us last week, the attempted suicide of Gordon at the Tombs, and another, of which public mention has been made, the Police Justices or other criminal officers should have inquired into them, and brought the offenders to trial. We know of a case, however, in which the District Attorney totally neglected his duty, even though the circumstances of the case (a death which would doubtless have been avoided had the apothecary obeyed the law), with the necessary evidence, were placed in his hands. It has not been heard of since, though a year has elapsed—the probable reason being the family relationship of the offender to a certain well known city official.

We allude to this subject again, to draw attention to the fact, that a provision for the enforcement of this and other important and neglected sanitary laws, is contained in the *Metropolitan Health Bill* now before the Legislature, in the following brief but comprehensive language: "*The Board of Health shall also, in the cities and counties named in this Act, enforce all laws and ordinances prohibiting or regulating the sale of poisonous, adulterated, or unwholesome drugs, medicine, or food.*" If for this clause only, the passage of the act referred to would be a great blessing.

—

At the meeting of the Academy of Medicine on Wednesday evening, March 19th, the members will be called upon to give a definite expression by discussion and vote, on the propositions submitted by Dr. Barker at the end of his paper on the "Use of Anæsthetics in Midwifery;" they are as follows:—

1*st*. Anæsthetic aid is of the greatest value in the obstetric art, and chloroform is generally the preferable agent for this purpose.

2*d*. It exerts no injurious effect, when properly administered, upon the health of either the mother or the child.

3*d*. It is perfectly justifiable to use chloroform in natural labor, solely for the purpose of relieving pain.

4*th*. It is especially useful in calming the extreme agitation and mental excitement which labor often produces in every nervous woman.

5*th*. It should be administered in those cases of natural labor where the progress is suspended or much retarded by the pain occasioned by previous diseases, or such as may supervene during labor, and in those cases where the irregular and partial contractions occasion intense and almost constant pain, but have no effect to advance labor.

6*th*. It is of great service in spasmodic contractions and rigidity of the cervix uteri, in tetanic rigidity of the perineum, in certain forms of puerperal convulsions, and in the various obstetrical operations.

It has been too much the custom heretofore to allow important questions that have been discussed to pass without final action. For the proper completion of such subjects, every member should be called upon to give his decision.

—

The report of the Philadelphia Board of Health presents some startling facts. Two years since the mortality of that city was officially reported at 1 in 64 of its population; for the year 1861, it was 1 in 39! The deaths by smallpox reached the enormous figure of 753! How is this alarming increase in mortality to be explained?

—

We have lately received an announcement of the Annual Medical Register of New York City. The compiler of this work is Dr. Geo. H. Tucker, one of the most laborious and reliable medical statisticians in this country. We have examined the manuscript sheets of the volume, and find the contents of great historical value to the profession. It is to be regretted that we have no *Medical Historical Society* engaged in collecting and preserving the memorials of the past, which are gradually being lost beyond recovery. In the absence of such an organization, a serial work of this kind which, like Valentine's Manual,

shall annually gather up the present medical records of this city, and such memorials of the past as patient research can bring to light, should be liberally sustained. The work will be published only on condition that a sufficient number of subscribers are obtained. We heartily endorse this undertaking of Dr. Tucker, and can assure the profession of the city that the work merits every encouragement.

Reviews.

Health; Five Lay-Sermons to Working People. By John Brown, M.D., Author of "Rab and his Friends," etc. Robert Carter & Brothers, New York.

A good investment for every medical practitioner would be to purchase half-a-dozen copies of this little book, and circulate them among his "families." It affords a most agreeable hour's reading, full of instruction, in the author's peculiar vein of pleasantry, and conveys sentiments, and inculcates practice, relating both to the doctor and the patient, and their mutual relationship, which cannot be too thoroughly instilled. We confess to have derived no little comfort and help from its pages, in the wearisome plodding of the daily round of practice.

Correspondence.

PLUGGING THE VAGINA.

[To the Editor of the American Medical Times.]

Sir:—The following illustrative cases will corroborate the statements made by Dr. E. P. Bennet in the Medical Times, on the use of the speculum, and also show the efficacy of Squibb's Liq. Ferri Persulph. in uterine hæmorrhage. I.—Mrs. B——, in the third month of pregnancy, began to flow after some unusual exertion. I saw her a few hours after. On a digital examination the os was found slightly open, but no membrances protruded. I at once introduced the speculum, and through it passed a conical piece of sponge, saturated with the persulphate, into the os, and retained it there with the forceps for a moment or two. There was no flow for twelve hours, when she suffered some severe uterine pains, and the contents of the womb were expelled in one mass. The loss of blood was very slight, and she regained her strength rapidly. II.—Mrs. W——, about ten weeks advanced in her gestation, returned home from a long walk and was taken with a profuse hæmorrhage from the vagina. I found her on the bed, her face completely blanched and her pulse a mere wave. I was told she had passed some clots, which had been thrown away. Stimulants were administered for immediate relief. Portions of the membrane were protruding from the os, which were removed. The speculum, having its inner surface well oiled, was introduced, and the end of a long strip of muslin, two inches wide, saturated with the persulphate, was carried firmly into the os, and as the speculum was withdrawn the vagina was thoroughly plugged. By these means the hæmorrhage was at once arrested. The tampon was removed after thirty-six hours, and the recovery, though slow, was uninterrupted. III.—I was called, about a year since, to see a woman who was suffering from profuse uterine hæmorrhage. She was fifty years of age, the mother of several children, feeble, and extremely nervous. All the means, general and local, that were practicable, were used to arrest the flow without success. The os was dilated with sponge tents, and the womb examined for polypoid growths, but none were found. My patient failing from day to day, as a last resort I injected two drachms of the persulphate into the cavity of the womb. The hæmorrhage ceased and she recovered. There has been no return of the trouble since.

Yours, etc.,

J. T. Conkling, M.D.

Brooklyn, N. Y., March 1, 1862.

DELIRIUM TREMENS SUCCESSFULLY TREATED BY THE ICED BATH.

Bellevue Hospital, Jan. 29, 1862.

[To the Editor of the American Medical Times.]

Sir:—Some two years since, in conversation with Dr. Bauer of Brooklyn, he suggested to me the use of the ice-bath in delirium tremens. Since that time I have used it several times with the most satisfactory results.

I have just received the inclosed letter from Dr. Smith, of the hospital at the Workhouse on Blackwell's Island, and if you deem it worthy please give it a notice in your valuable journal.

In connexion with this case I would refer to another which came under my treatment some weeks since.

I was called about 11 P.M. to one of our fashionable hotels, to see a gentleman with delirium tremens. He was under the care of two of the best physicians in the city, and yet he was unable to be composed. Had had no sleep for some time, was perfectly wild, great muscular tremor, and jactitation; pulse 160. He was placed in the ice-bath, and retained there 10½ minutes, when he became quiet; pulse 76. He was then placed in bed, and almost immediately dropped asleep. The nurse was directed to repeat the bath in case he again became wild; but strictly cautioned about the danger, and the necessity of carefully watching the pulse in order not to produce too great exhaustion. The next morning I called in consultation at 10 o'clock, and found the patient had gone to business. The nurse stated that he slept quiet until 4 A.M., and then began to talk a little wild; he put him in the bath for three minutes, when he became quiet and was put in bed; he immediately fell asleep, and got up at 8 o'clock, perfectly well, ate his breakfast, and went down town to business.

It is only necessary to refer to the travels of any person in the arctic region, to learn the powerful sedative effect of intense cold; in fact, it is impossible to rouse them up and prevent them from going to sleep. Now this is the great object to be produced in delirium tremens, and in the application of cold we have an agent more powerful than opium, and equally safe if carefully watched.

Yours, etc.,

Lewis A. Sayre, M.D.

New York, Jan. 28, 1862.

Dear Sir:—I have at last had an opportunity to try the ice-water bath for the cure of delirium tremens, as you requested me to do, and I am happy to be able to give you the history of my first case, the result of which is quite satisfactory.

John Wilson, a native of England, 45 years of age, blacksmith by trade, has been in this country fourteen years; he has an excellent constitution, and is remarkably strong and vigorous; was sent to the Workhouse, Jan. 19, 1862. Jan. 20th.—Showing no signs of delirium he was set to work. On the evening of Jan. 22d he became so delirious that we were obliged to place him in a cell by himself, with no medical treatment; for I wished the height of his delirium to have been attained that I might give the ice water a fair trial. He became gradually worse until the evening of Jan. 23d, when it became necessary to place a strait jacket on him. His delirium continued to increase during the night so much, that we were obliged to tie him down. Jan. 24th.—He was now as wild as it was possible for him to be. I had the bath prepared, and sent for Dr. Clark of the Almshouse. 8½ o'clock A.M., the strait jacket was now removed, and his lungs examined by Dr. Clark and myself and found perfectly healthy; he was stripped, and placed in the bath-

tub, where he was kept nine minutes; the ice was broken into small pieces, and dropped in during the whole time; temperature of the water 38°. His pulse was now 102 beats per minute. 1st minute, no change perceptible; 2d minute, no change perceptible; 3d minute, pulse stronger, and not so frequent; 4th minute, sedative effects very perceptible; 5th minute, pulse 100; 6th minute, sedative effects more marked; 7th minute, pulse 90; 8th minute, pulse 80; 9th minute, patient perfectly quiet. He was now removed from the bath, rubbed dry, and placed in bed, well covered up. Ten minutes after, pulse 72; he lay quiet; talks perfectly rational. Nine o'clock, pulse 85; has stopped talking, and is perfectly quiet. He remained quiet until 1 o'clock P.M.; did not sleep; then symptoms of delirium again began to show themselves, and increased rapidly until 8 o'clock P.M. He was again placed in the bath; temperature of the water 38°; pulse 82. He was kept in the water this time twelve minutes. 3d minute, sedative effects marked; 4th minute, pulse slower; 6th minute, pulse 64; 11th minute, pulse 50; 12th minute, he was now on the verge of syncope, and gasping. I immediately removed him from the bath, had him rubbed dry, and placed in bed, when he soon went to sleep. Jan. 25th.—Slept well all night, ate his breakfast, and has again gone to sleep. Jan. 26th.—Slept well last night. Jan. 27.—Eats heartily; no symptoms of tremor remain. Jan. 28.—He has gone to work, perfectly well. I am confident that if I had continued the first bath, until I had made a more decided impression upon him, there would have been no occasion for the second one; but it was the first time I had ever seen anything of the kind, and I was naturally afraid of so powerful a remedy.

Yours, etc.,

ORSAMUS SMITH,
Resident Physician.

DR. LEWIS A. SAYRE.

FOREIGN MEDICAL NOTES.

IN Paris, one of the most recent scientific events has been the appearing of Ricord in the amphitheatre of Hotel Dieu, by special invitation of M. Trousseau (or rather, I might say, he was forced out by the "*contagionnistes secondaires*"), who furnished him with the following knotty text to preach from:—

A young woman, eighteen years of age, entered the 6th of September in the service of Professor Trousseau to receive treatment for metritis. She had been vaccinated in infancy, as well marked traces in both arms were to be seen. In October there existed in the same service an epidemic of varioloid, and as our patient was obliged still to remain in the hospital, she was freshly vaccinated in the first days of said month. The vaccine was got from a child of good aspect, and whose mother was healthy. The same vaccine served four others, and in all five its phases were normal. In the young woman, on the contrary, it did not work so well; the pricks made with the lancet became prominent the day after, with an inflamed areola, itching extreme; and four or five days after all signs of a sore had passed away. She left the hospital November 9th, that is to say, a full month after the operation, without having presented any pustule or any suspicious coloration at the point of vaccination. After her liberty she was well until the first days of December, when she returned to show her arm, which had at the place vaccinated two ulcerations covered with thick cabs, and stratified like scabs of rupia. These ulcerations were at the time regarded as being the result of a vaccination of long incubation. *à début tardif, à marche anormale.* One month later, January 11th, 1862, Madame X. applied for readmittance to the Hospital, as her uterine affection required still further treatment. At this date the *apparent* vaccine sores had not cicatrized, but continued to suppurate; their scab seemed indurated; in the axilla was found adenopathy, while on the trunk, arms, and chin, bloomed a roséole, the specific nature of which could not be doubted, and besides, there was cephalalgia and occipital adenopathy. The patient stated that the eruption had existed since the middle of December, 1861, that is to say, six weeks after inoculation of the vaccine.

DIAGNOSIS OF M. RICORD.

Ulcus elevatum, double, on the left arm, *pléiade ganglionnaire, roséole spécifique*, type of syphilis constitutional, having had its origin, its *porte d'entrée*, in the two ulcerations of the left arm.

How did this woman contract syphilis? M. Ricord gave two lectures upon this case, and on each occasion the little amphitheatre of Trousseau was densely crowded with admiring friends, for he was always popular. He commenced by making the following rapid *exposé* of his doctrine in syphilis, which, with some slight modifications, is as of old, as that still inculcated at *Hôpital du Midi*:—No syphilis without chancre—*chancre induré* is the *chancre infectant*—the *chancre infectant* has, as consequence, indolent adenitis, non-suppurating and always general infection, if not opposed by proper treatment. Soft chancre, non-infecting:—neighboring glands may inflame, be painful, and suppurate. Every individual having had an indurated chancre can contract but a soft chancre, unless the syphilitic diathesis had been entirely eradicated by treatment, which is comparatively rare. M. Ricord no longer believes that the difference in these chancres is owing to difference of *terrains*, and now admits the duality of virus.

As for the contagious powers of secondary affections M. Ricord *concedes that such accidents do occur*, but that they are of very rare occurrence. Dr. Sarrhos, he stated, inoculated himself with matter from secondary affections over thirty times, and always without success. Also M. Cullerier (successor to Ricord at the Midi Hospital) was inoculated in the forearm a great number of times with the morbid secretions of secondary syphilis, and always with impunity. While he admits that secondary can be *occasionally* contagious, M. Ricord is of opinion that the advocates of this doctrine have frequently mistaken an indurated chancre for a *plague mucus*, and have in this manner procured so much evidence in their favor.

Finally, can syphilis be transmitted by the blood? Can the blood of an individual, syphilitic when it gets inoculated, generate syphilis in the same manner as pus taken from an indurated chancre? Is the blood of a syphilitic contagious? Evidently not; if so, what would be the consequence of bleeding, blistering, and leeching one-third of our Hospital patients in large cities? And where is the surgeon who has not again and again literally washed his hands, regardless of excoriations, in syphilitic blood, and have any of them as yet contracted the disease in such manner?

How the subject of these observations contracted syphilis is not decided. The great Ricord staggers, and the momentous question as to whether or not vaccine is a vehicle for syphilis remains open for further dissertation. *Lumière s'il vous plait.*

CYGNET.

Jan. 31, 1862.

BARON SECTIN, member of the Senate, and physician-in-chief of the Belgian army (1831–40), etc., has just expired at Brussels, at the age of sixty-nine. This distinguished practitioner was ennobled by King Leopold. He was also an officer of the Legion of Honour.—*Brit. Med. Jour.*

LIST OF THE NAMES OF SURGEONS AND ASSISTANT SURGEONS APPOINTED TO THE VOLUNTEER REGIMENTS OF THE STATE OF NEW YORK, SINCE JAN. 24, 1862, AND THE CHANGES WHICH HAVE OCCURRED IN THE REGIMENTS IN THE FIELD FROM THE SAME DATE.

Feb. 18.—Henry C. May, M.D., Surgeon 5th Regt., vice James L. Van Ingen, discharged; Owen Munson, M.D., Assist. Surgeon 5th Regt., vice B. Ellis Martin, resigned; A. F. Fitch, M.D., Assist. Surgeon 79th Regt., vice ——————, on parole. Feb. 20.—Robert V. McKim, M.D., Assist. Surgeon 57th Regt., promoted to Surgeon, vice Geo. H. Leach, resigned; Henry C. Dean, M.D., Assist. Surgeon 57th Regt., vice Robert V. McKim, promoted; W. C. Lewis, M.D., Assist. Surgeon 82d Regt. (2d N. Y. S. M.), vice —— Ferguson, on parole.

DEATH.

WILLIAMS.—On March 1st, at his residence in this city, A. V. WILLIAMS, M.D., in the 60th year of his age.

ERRATUM.—In Drs. Roosa and Little's Hospital Report, page 122, second line, instead of "Scalp Wounds of Brain," read "Scalp Wounds."

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 23d day of February to the 2d day of March, 1862.

Deaths.—Men, 92; women, 76; boys, 136; girls, 120—total, 424. Adults, 168; children, 256; males, 228; females, 196; colored, 7. Infants under two years of age, 168. Children reported of native parents, 25; foreign, 192.

Among the causes of death we notice:—Apoplexy, 6; Infantile convulsions, 40; croup, 10; diphtheria, 13; scarlet fever, 41; typhus and typhoid fevers, 10; cholera infantum, 0; cholera morbus, 0; consumption, 64; small-pox, 9; dropsy of head, 18; infantile marasmus, 22; diarrhœa and dysentery, 0; inflammation of brain, 8; of bowels, 5; of lungs, 31; bronchitis, 6; congestion of brain, 13; of lungs, 7; erysipelas, 3; whooping cough, 4; measles, 2. 230 deaths occurred from acute disease, and 45 from violent causes. 299 were native, and 125 foreign; of whom 81 came from Ireland; 1 died in the Immigrant Institution, and 45 in the City Charities; of whom 11 were in the Bellevue Hospital.

Deaths for the Week ending March 4, 1861	403
" " " " February 24, 1862	400
" " " " March 3, 1862	424

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Feb. 1862	Barometer. Mean height.	Barometer. Daily range.	Temperature. Mean	Temperature. Min.	Temperature. Max.	Difference of dry and wet bulb. Thrm. Mean	Difference of dry and wet bulb. Thrm. Max.	Wind.	Mean amount of cloud.	Humidity. Saturation, 1000
	In.	In	°	°	°	°	°			
22d.	29.84	.40	36	30	42	3	6	W.	10	809
23d.	29.74	.11	37	33	40	2	4	NE to SW	9	859
24th.	29.84	.97	35	20	43	3	4	NE to NW	7	780
25th.	30.21	.34	22	14	30	6	9	N.W.	1	600
26th.	30.00	.40	31	24	37	3	5	W.	9	756
27th.	29.57	.20	30	23	36	3	4	N.W.	7	772
28th.	29 63	.10	24	17	30	5	7	N.W.	0	661

REMARKS.—23d, Very light rain early A.M.; sunshine 9 A.M.; fog late P.M. 24th, Fog and light rain A.M.; the lowest point of the barometer for the month, 29 inches, was on this day, at the time of the highest range of the thermometer, and upon the 25th occurred the highest point of the barometer and the lowest temperature; this state of the air preceded and accompanied a change of wind and tempest which lasted twelve hours. 26th, Variable A.M., cloudy P.M. 27th, The heaviest snow storm of the season (6 inches on a level) commenced at 2 A.M., lasting twelve hours. 28th, Fresh wind all day. Rain and melted snow for the week 0·78 inch; for the month 8 inches.

REPORT OF THE METEOROLOGICAL COMMITTEE OF THE COUNTY MEDICAL SOCIETY, READ MARCH 3, 1862.

	Degrees.
Mean temperatnre for the month of February	30
" " at 6 A.M.	25
" " at 10 A.M.	30
" " at 2 P.M.	35½
" " at 6 P.M.	32
" " at 10 P.M.	28
Mean temperatnre of evaporation at 6 A.M.	22
" " " at 10 A.M.	26½
" " " at 2 P.M.	30½
" " " at 6 P.M.	28
" " " at 10 P.M.	25
Mean minimum temperature	24
" range	6
" maximum temperature	30
" temperature of evaporation	26
Minimum temperature in the mouth, on the 25th	14
Maximum " " " " 24th	48
Minimum of evaporation	11
Maximum " "	44
Mean weight of vapor in a cubic foot of air	1·72
Minimnm " " " " "	1·12
Maximum " " " " "	3·21
Mean height of barometer at 6 A.M.	in. 29 95
" " " at 2 P.M.	29 94
" " " at 10 P.M.	29 96
Mean height of barometer for the month	29·94
Minimum " " on the 24th	29·04
Maximum " " " 25th	30.34
Inches of rain and melted snow	3
Days of Easterly winds	7
" Westerly winds	21
Days mostly clear	12
" cloudy	16
Hours of rain, hail, and snow	90
Clear sunrises	10
" sunsets	8

REMARKS.—The month was warmer, damper, more cloudy, and stormier than usual.

MEDICAL DIARY OF THE WEEK.

Monday, March 10. { New York Hospital, Dr. Halsted, half-past 1 P.M. Bellevue Hospital, Dr. Thomas, half-past 1 P.M. Eye Infirmary, 12 M.

Tuesday, March 11. { New York Hospital, Dr. Markoe, half-past 1 P.M. Bellevue Hospital, Dr. Loomis, half-past 1 P.M. Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Wednesday, March 12. { New York Hospital, Dr. Cock, half-past 1 P.M. Bellevue Hospital, Dr. Sayre, Is. Hos., half-past 1 P.M. Eye Infirmary, 12 M. Pathological Society, half-past 7 P.M.

Thursday, March 13. { New York Hospital, Dr. Halsted, half-past 1 P.M. Bellevue Hospital, Dr. Elliot, half-past 1 P.M. Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Friday, March 14. { New York Hospital, Dr. Markoe, half-past 1 P.M. Bellevue Hospital, Dr. Flint, half-past 1 P.M. Eye Infirmary, 12 M. Dr. Noyes's Lecture, half-past 1 P.M.

Saturday, March 15. { New York Hospital, Dr. Cock, half-past 1 P.M. Bellevue Hospital, Dr. Wood's Clinic, 1 P.M. Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICES.

ALUMNI ASSOCIATION, COLLEGE OF PHYSICIANS AND SURGEONS, MEDICAL DEPARTMENT OF COLUMBIA COLLEGE.—*The Annual Oration before the Association will be delivered by* D. TILDEN BROWN, M.D., *(class of 1844,) of New York, at* DR. PARKER'S *Church, corner of 22d street and 4th Avenue, on Thursday, March 13th, at 7½ o'clock P.M., after the usual Commencement exercises. The Alumni of the College are requested to assemble in the Lecture-Room of the Church at 7 o'clock.*

The Annual Meeting will be held at the residence of PROF. ALONZO CLARK, 30 *East 21st street, on Friday 14th inst., at 8 o'clock P.M.*

BELLEVUE HOSPITAL MEDICAL COLLEGE.—*The Commencement exercises of this College will be held on Monday evening, Feb. 10th, at 7½ o'clock P.M., at Irving Hall, corner of Irving Place and 15th street. Addresses will be made by the* HON. SIMEON DRAPER, *President of the Board of Trustees, and the* REV. E. H. CHAPIN; *by* PROF. GEORGE T. ELLIOT *on the part of the Faculty, and* DR. V. B. HUBBARD *on the part of the Graduating Class.*

The Examination for Junior Assistants to Bellevue Hospital will take place on March 18, 1862. Application must be made at once to the Chairman, JAMES R. WOOD, 2 Irving Place. The applicant must come recommended to the Committee by a member of the Medical Board of Bellevue Hospital.

JAMES R. WOOD, CHAIRMAN.

At a Meeting of the Students of BELLEVUE HOSPITAL MEDICAL COLLEGE, the following Resolutions were unanimously adopted:—

Whereas, During the present session of 1861-2, the Faculty of the Bellevue Hospital Medical College have been unceasing in their labors and endeavors, to place within our reach every possible means and privilege for the interest and benefit of the attending class; and, in view of the foregoing facts, deeming it just and proper that we should give public expression to the feeling of perfect satisfaction which the course of instruction received during the past term, has given every member of this class; therefore,

Resolved, That as an expression of our appreciation of the unremitting interest they have manifested in all departments of instruction, and as a slight return for the many benefits we have received, we hereby tender to the *Faculty of the Bellevue Hospital Medical College*, our sincere and heartfelt thanks.

Resolved, That the Commissioners of Public Charities and Correction, by giving students of medicine access to the public institutions under their charge, thus granting them extraordinary facilities for the practical study of disease in all its forms, have conferred a great benefit upon the medical profession, and consequently upon the community at large.

Resolved, That it is our unanimous conviction, founded upon the past winter's experience, that the *Bellevue Hospital Medical College*, from the thorough combination of didactic with clinical teaching, and from its intimate connexion with the most extensive hospitals on this continent, offers advantages and facilities for the acquisition of a thorough and practical medical education heretofore unknown in this country.

Resolved, That Messrs. Peck, Dwight, and Daniels, be appointed a committee to present a copy of these Resolutions to the Faculty of Bellevue Hospital Medical College, also, to the Commissioners of Public Charities and Correction, and secure the publication of the same in the AMERICAN MEDICAL TIMES and *New York Medical Monthly*.

A. G. AVERY, M.D., CHAIRMAN.
G. B. MILLER, M.D., SECRETARY.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians (principally country Physicians) Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phcn., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phcn., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phcn., No. 19 Rue Bourbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phcn., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Grannle contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phcn., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyoscianus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phcn., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

CLINICAL LECTURES ON THE PUERPERAL DISEASES.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE.
By B. FORDYCE BARKER, M.D.,
PROFESSOR OF MIDWIFERY AND DISEASES OF WOMEN, ETC., ETC.

LECTURE III.—PART I.

ON INFLAMMATION OF THE BREASTS AND MAMMARY ABSCESS.

Gentlemen:—I call your attention to-day to a class of affections, the importance of which can hardly be exaggerated. Inflammation of the breasts and mammary abscess are more liable to be developed during the first four weeks after confinement than at any other period, but it may occur at any time during lactation or gestation. It sometimes, although much more rarely, is met with entirely unconnected with either of these states, as I have seen in the young girl, and even in the new-born infant of *both* sexes, and this, too, where I had no reason to believe that the breasts had been maltreated by an ignorant or prejudiced nurse, from the absurd belief that the milk in the breasts of the infant must be squeezed out. When inflammation of the breasts and mammary abscess occurs during the puerperal state it is always a deplorable, and sometimes a very grave and dangerous complication, as not unfrequently there are a succession of abscesses which not only interrupts, but may permanently destroy the functions of the organ; the spirits of the patient are broken, the strength of mind shaken, and the general system is exhausted, and for a time seriously impaired. You should also know the fact that such cases sometimes terminate fatally, even when under the treatment of the first talent, and those of the largest experience in the profession, as for example:—Velpeau gives a resumé of two hundred cases, which occurred in his service, three of which died, one hundred and thirty-nine were cured, in twenty-eight the cure was incomplete, and the results in the remainder of the cases were unknown. The reputation of the medical attendant under such circumstances is also seriously jeopardized, as the popular belief is, that such a train of consequences must be due either to neglect or mismanagement on the part of the monthly nurse, or the doctor. So general is this belief, that monthly nurses are almost as ready to admit that they have committed fornication, as to acknowledge that any woman that they have taken care of has had a "broken breast." And we see the influence of such a belief on the profession in the statements which now and then appear in the medical press, that inflammation may be arrested, and abscess prevented, by rubbing the breasts, or by the use of belladonna, or by some other special local treatment.

Now all such statements are worse than nonsense, for they are sure to mislead and grievously disappoint those who place any reliance upon them. Whenever you meet with such statements you may be sure that they emanate from those of little clinical experience, who have deduced general principles from a very limited number of observations. The special literature on this subject is unusually rich, as, in addition to all you find in your obstetrical and surgical text books, Sir Astley Cooper, the most distinguished and brilliant of modern English surgeons, has written a treatise on the diseases of the breasts, which will long be a classical authority. Velpeau, who holds a corresponding rank among the living surgeons of France, has published, a few years since, a volume of more than seven hundred pages on this subject, which ought before this to have received an English translation. During the past year a paper on Mammitis, with an analysis of seventy-two cases, was read by Mr. T. W. Nunn, Surgeon to the Middlesex Hospital, before the Obstetrical Society of London. Important contributions on this subject may be found scattered through the medical periodicals of this country and of Europe. I may particularly mention some articles which have appeared in our own journals, as in the *New York Journal of Medicine*—one by Dr. Conant Foster, formerly Physician to this Hospital; a Report of fourteen cases, by Dr. John G. Johnson, formerly House Surgeon to this Hospital; and in the *American Medical Monthly*, a valuable Essay, by my colleague, Dr. Thomas. I give you the principal literature of the subject, because, if any of you should have a perplexing and tedious case of this kind, as may very likely happen to you soon after commencing practice, if you feel the right kind of interest in your cases, and are animated by a true medical spirit, you will be anxious to search out all that is known on it. I fear also that you will find that the appropriate treatment adapted to each special indication, and to each special case, is still left somewhat vague and uncertain. In a clinical lecture you can only anticipate a discussion of the pathology and therapeutics of the subject, and from the opportunities that I have had to study it practically, both in hospital and private practice, I shall aim to give you, not a recapitulation of what you can read better in the authorities I have before mentioned, but to supply, however imperfectly, a want of definite principle and rule for practice, which I am sure has often been felt.

Causes of Mammitis.—Lactation is by far the most frequent of the predisposing causes. Thus, of Mr. Nunn's seventy-two cases, fifty-eight occurred during lactation, seven during pregnancy, and seven in women neither pregnant nor lactating. Of the fifty-eight lactating cases fifty-seven per cent. occurred during the first two months of lactation; during the subsequent seven months, only fourteen per cent.; but after the ninth month, twenty-nine per cent. You thus see that over-lactation is also a predisposing cause. *Epidemic influence* should also be mentioned as a predisposing cause, just as some years we see an epidemic tendency to boils and carbuncles. This was particularly manifest in the fall and winter of 1859–60, in this city; and, as I learn from the statements of physicians, it was equally so in other parts of the State, and in New England. When I came on duty in this hospital, in October, 1859, there were fourteen cases of mammary abscess in the wards. During my service there were sixteen additional cases, while three-fourths of all confined here exhibited more or less tendency to inflammation of the breasts. During my service this winter I have had the opportunity of showing you but two cases, and those I found here, when my service began. I am not aware that any author has mentioned epidemic influence as a predisposing cause, but you see from the facts that I have just mentioned that it really is so. If you look at Velpeau's cases you will see that he had twenty-four in 1837, and but four in 1839. The principal exciting causes are:—Exposure to cold; moving the arms too much, while the breasts are large and distended; repressing the secretion of milk at an early period; obstructed lacteal ducts; bruises, and other external injuries; and emotional—as mental disturbances, fright, etc. The influence of the latter, although frequently overlooked, has been particularly noticed by many authors, and is another illustration of the great importance to the physician, of a thorough appreciation of what is called the morale of his patients.

Pathology.—Inflammation of the breasts may occur in three situations: first, in the subcutaneous areolar tissue; second, in the gland itself; and third, in the areolar tissue between the gland and the thoracic walls; and as this inflammation frequently, some authors say generally, goes on to suppuration, we have three kinds of mammary abscess, viz., the *subcutaneous*, the *glandular*, and the *subglandular*. Different terms have been used by authors to describe these forms of abscess, but those I have used seem to me the most simple and significant. The inflammation is described by Sir Astley Cooper, and no one since has given a better

description, as adhesive in the first stage, suppurative in the second, and ulcerative in the third. In fact, the same laws govern inflammation of these tissues of the breasts as govern inflammation of the same tissues in other parts of the system, modified only by certain peculiarities of anatomical arrangement of structure. In the first stage these laws are precisely the same. In the suppurative stage they are the same, when the inflammation is confined to the subcutaneous areolar tissue: it is a simple phlegmonous inflammation, differing in no way from abscesses of this kind in other situations, except that it is always distinctly circumscribed. The third stage of this form of mammary abscess is also like the same stage in other phlegmonous abscesses, as it opens by ulcerating the tissues from the interior to the exterior; unless for the purpose of curing it more speedily an artificial opening be made by means of the lancet or bistoury.

In the glandular variety one lobule after another may become inflamed, so that a succession of abscesses form in different parts of the gland. In the subglandular, the pus usually at first finds an exit at the lower and outer side of the gland, but generally it also appears later at other points of the circumference. The apertures through which the pus discharges itself frequently degenerate into fistulous canals, which are often very difficult to cure. Here we have some of the modifications due to peculiarity of arrangement of the anatomical structure. If you look over the published reports of the cases by the authors that I have before mentioned, you will find very many in which the succession of abscesses and number of apertures for the discharge of pus counts up to ten, twenty, thirty, and in one of Velpeau's cases, even to forty-five in the same breast. You can readily conceive how such a train of events will wear out the system, and break down both body and mind. But these are not all of the conditions which may contribute to such a result. The ulcerative process is generally gradual and of a normal kind, that is, preceded by a fibrinous exudation, which protects the adjacent tissues; but not unfrequently in the glandular, and especially the subglandular forms, there is a destructive disorganization of texture, resulting in more or less extensive sloughs. The percentage of such cases is by no means small. The extent of the slough is of course proportionate to the destruction of tissue. In one of the cases reported by Dr. Foster the slough is described as being as large as a hen's egg. But this is not all, the destructive ulcerative process may involve the bloodvessels of the part where the abscess is situated, and dangerous and even fatal hæmorrhages may result. Prof. Miller, of Edinburgh, in his Principles of Surgery, refers to thirteen such cases which have been published in different medical periodicals, and he asserts that there are others. You see that I have been compelled in the discussion of this subject to encroach somewhat upon the chair of the Principles of Surgery, but it was necessary, in order that you should fully understand it, and perhaps, also, for your future protection from ignorance or malice; for it may happen to you, as has happened to others, destructive ulceration having followed milk abscess to such an extent as to produce repeated and protracted hemorrhage, that you should be accused of cutting an artery in opening an abscess, and hence be held responsible for the recurrent hemorrhages, which persist for weeks in consequence of the continued ulcerative process, in spite of the most judicious and best directed local and constitutional means to arrest the process. While our profession, as a whole, is characterized by high-toned principle, there are some few, very few I believe, dishonorable men in it who are capable of any meanness.

Diagnosis.—While it is of great importance, with reference to the prognosis and treatment, that an accurate diagnosis should be made as to the form of mammitis that we have to encounter, it must not be forgotten that any two or all three varieties may be met with, or one variety may be primitive, and one or both of the others may be secondary. Subcutaneous mammitis presents only the ordinary signs of phlegmonous inflammation of the areolar tissue, which it is unnecessary for me to describe; for I must assume, in a clinical lecture, that you are familiar with the principles of general pathology. If suppuration has taken place, where the abscess points the tegumentary covering has become thin and of a bluish or a livid color. To detect fluctuation, with one hand press the breast against the chest, while with the fingers of the other you palpate the projecting tumor. If there has been circumscribed tumefaction, redness of the surface, a thinning of the skin, and other signs of local inflammation gradually developing for some days, it will hardly be possible for one of ordinary intelligence and acquirement to make a mistake as to the case he has to treat. In this form of inflammation, where appropriate treatment is resorted to, it rarely happens that we have more than one abscess. The constitutional symptoms attending glandular inflammation are much more marked; there is much more febrile reaction, the local pain is much more intense. During the inflammatory stage there is a nodulated induration, varying in size according to the extent of gland involved, called by nurses a lump in the breast; and the function of lactation is painful, imperfect, and often entirely suspended, so far as the breast involved is concerned. It is the form of mammitis which succeeds lacteal obstruction, or engorgement, when this exists. The abscesses resulting are frequently multiplied, particularly if the gland be irritated by a continued effort to keep up lactation. Velpeau says that he has seen in the course of two or three months, twenty, twenty-five, thirty-three, forty-six, and in one case fifty-two abscesses in the same breast. He regards this form of abscess as much more frequent than either of the others. Suppuration takes place much more slowly than in the other forms where the seat of the inflammation is the areolar tissue, two, three, or four weeks passing before pus is formed, during which the breast is engorged either partially or completely, and is the seat of profound lancinating pains. The subglandular inflammation usually occupies the whole of the areolar tissue at the base of the breast. The surface of the breast is not usually sensitive to the touch or painful, but there is a deep-seated pain, greatly increased by pressure on the whole organ. When suppuration has taken place the breast presents a smooth even surface, without lumps, but is often greatly enlarged, sometimes enormously so, with a feeling of great weight and distension, irregular chills and partial perspirations. If both the areolar and glandular tissues are inflamed, or one is developed as secondary to the other, there will, of course, be found more or less of the signs characteristic of each combined.

The Wisconsin State Hospital for the Insane.—This institution was opened in July, 1860. It is situated in Madison, Dane Co., and is under the care of Dr. J. P. Clement as Medical Superintendent, and Dr. John W. Sawyer as Assistant Physician. From Dr. Clement's second Annual Report, we learn that since the opening of the hospital there have been admitted 145 patients—72 males and 73 females. Discharged, 42—21 males and 21 females. There now remain 103—51 males and 52 females. Of those discharged, 16 were recovered, 7 improved, 8 unimproved, and 11 died. The total amount of current expenses for the past year was $20,640.76. The Trustees call for an appropriation of over $40,000 for the present year—of which $3,500 will be needed to replace the boilers now in the new hospital, which have proved unsuitable for the place, and a source of great annoyance. It is stated that to run the machinery with these boilers there will be required, when another wing of the building, now being erected, is completed, 1000 cords of wood per annum. When this building is finished, which will be during the coming summer, the hospital will accommodate more than 200 patients.—*Bost. Med. Jour.*

Dr. Felix Roubaud, Inspector of Waters at Pougues, and formerly journalist, is about to marry, say the French journals, the young widow Countess de Montureux.

Original Communications.

THE CLIMATE OF THE STATE OF MINNESOTA,

AND ITS ADAPTATION TO PERSONS SUFFERING FROM PHTHISIS PULMONALIS.

By GEORGE LEWIS, M.D.,

OF ST. PAUL, MINNESOTA,

MEMBER OF THE NEW YORK ACADEMY OF MEDICINE, OF THE NEW YORK PATHOLOGICAL SOCIETY, ETC., ETC.

Perhaps there is no question of more vital importance to the welfare of the community at large, which the medical profession are so frequently called upon to decide, and which they feel so little qualified satisfactorily to determine, as that of the adaptation of certain latitudes or climates to peculiar morbid conditions of the human system. From the days of Hippocrates to the present the modifying agency of climate upon the tubercular diathesis has been recognised by the medical profession. To gain some adequate conception of its importance, we need but contemplate the increasing and universal prevalence of tubercular disease, which in some portion of our land, especially in the New England and seaboard States, causes nearly twenty-four per cent., or one-fourth of their entire mortality.* So universal is the prevalence of this disease that scarcely a family circle exists which has not been invaded by this fell destroyer, and in numerous instances whole families have fallen before the relentless progress of this fatal malady.

That the influence of climate is more efficacious in modifying and controlling this than most other diseases, the practice so much in vogue of sending patients suffering from phthisis pulmonalis from one latitude to another, generally from a colder to a warmer climate, sufficiently attests. On the Continent of Europe, the south of France, Italy, Greece, also Egypt, in the valley of the Nile, the Isle of Madeira, have been famous places of resort in which the languishing consumptive has taken a winter residence with varying degrees of benefit. Nearer home the mild climate of the West India Islands, and in our own country the genial salubrity of Florida, the pine forests of Georgia, offered inviting places of resort to phthisical patients who were anxious to escape the inclemency of our northern winters. More recently, as the tide of emigration and civilization has extended westward into the central portion of our continent, and to the Pacific shores, other climates have been brought to our notice, which demand at least the attention and patient investigation of the medical profession. Such are the climates of western Texas, New Mexico, the Pacific slopes of lower California, the upper Mississippi Valley, and a large area of country extending westward between it and the Rocky Mountains.

It is no part of my present purpose to enter into a discussion of the comparative merits of any of the above-named climates as a place of residence for tuberculous patients. It is the object of this communication, after giving the climatology of this region, and contrasting it with other portions of the country, merely to place upon record such observations as a winter's residence in the upper valley of the Mississippi enabled me to make, that may serve in some measure as a guide to the medical profession in determining more accurately with regard to its appropriateness as a place of residence for patients suffering from tuberculous disease.

Especially is it important in the present distracted state of our country, since the moral insanity of our southern brethren has deprived the invalid portion of the community of their usual places of winter resort, for the medical practitioner to know with some degree of precision if the wonderful changes reported to have been wrought in tuberculous constitutions by a residence in the climate of Minnesota are entirely groundless. The loss of a brother by phthisis pulmonalis, who had passed one winter in the valley of the Nile, and another in Florida, without permanent benefit, and the unequivocal evidence of the development of tubercles in my own person, compelling me to retire from a somewhat laborious practice, have brought the subject to my own mind with peculiar force.

The leading characteristics, which distinguish the climate of Minnesota from that of our New England and Atlantic States are its wet and dry seasons, its remoteness from oceanic influences, its uniformly high position, occupying as it does the elevated plateau of the North American continent. Its altitude at Fort Snelling, five miles above St. Paul, lat. 44° 53′, is 820 feet; at Fort Ridgley, some distance southwest of this point, lat. 44° 15′, it is 1100 feet, and at Fort Ripley, northwest, lat. 46° 19′, it is 1130 feet, above the level of the sea.

The arctic declivity commences about its northern boundary, as is evident from the northerly direction of rivers having their origin there, and in the southern boundary of the British possessions. The head waters of our great northern chain of lakes, having their origin on its north-eastern boundary, find an outlet through the channel of the St. Lawrence River, which takes a north-easterly course, pouring its ceaseless torrent into the Atlantic Ocean. The Red River of the North, having its source in the northern border of this State, takes a course nearly due north, and empties into Hudson Bay.

Not far remote from the origin of the Red River rise the numerous rivulets whose confluence forms the Mighty Father of Waters, which taking a southerly direction rolls onward in silent majesty until, having traversed a territory of three thousand miles in extent, it loses itself at length in the Gulf of Mexico. From the foregoing circumstances the term Water Shed of the Continent has been not inappropriately applied to this country.

The surface of the country is gently undulating, and beautifully diversified with forest islands, and dotted with lakes of pure water, which swarm with fish of a superior quality. The soil is composed of a dark, sandy loam, and is warm, fertile, and productive, and free from the malarial exhalations which are usually rife in new countries, and act so potentially in undermining enfeebled constitutions.

We have remarked that one of the leading characteristics of the climate of Minnesota is its wet and dry seasons, being in this particular an inversion of the climate of California—the dry season in Minnesota corresponding to the wet season in California, and *vice versa*.

Reversing the usual order of arrangement we shall place the statistics of precipitation before those of temperature, and for convenience sake, while speaking of this subject, shall divide the year into two seasons. What may be termed the wet season usually commences about the first of April, and continues six months. The records of mean annual precipitation, as kept at Fort Snelling, five miles above St. Paul, extend over a period of nineteen years, and correctly represent the amount of precipitation for this place, and its vicinity. The table annexed shows the monthly mean for the six months of wet season at St. Paul, and also the same for the corresponding months at New York.

At St. Paul.		At Ft. Columbus, N. Y. city.	
April....	2·14 inches.	April....	3·33 inches.
May	3·17 "	May	4·78 "
June....	3·63 "	June	3·46 "
July	4·11 "	July	3·17 "
Aug.	3·18 "	Aug.	4·70 "
Sept....	3·32 "	Sept....	3·81 "
	19·45 "		22·75 "

Excess of precipitation at New York.....3·30 inches.

* See Blodget's Climatological Distribution of Pulmonary Disease, page 471.
In New Hampshire 21 per cent. of the mortality is from phthisis; in Massachusetts, 22 per cent.; in Vermont, 24 per cent.; in Maine, 22 per cent.

The following table shows the mean precipitation for the six months of dry season, commencing with October, and the same for the corresponding months at New York.

At Ft. Snelling, 19 years.		At New York, 19 years.	
Oct....	1·35 inches.	Oct....	3·40 inches.
Nov....	1·81 "	Nov....	3·79 "
Dec. ...	0·67 "	Dec. ...	3·03 "
Jan. ...	0·73 "	Jan.....	2·78 "
Feb. ...	0·52 "	Feb. ...	2·92 "
March..	1·80 "	March..	3·44 "
	5·88 "		20·06 "

We notice here a mean for the six months of dry season in Minnesota a fraction less than one inch per month.

Excess at New York for the same time ... 14·18 inches.
Excess for the year at New York..... 17·48 "

When we compare the annual mean amount of precipitation here, with that of the New England and Atlantic States, the contrast is striking. The following table is so arranged as to show the mean, maximum, and minimum of precipitation for a series of years at a considerable number of places in our Atlantic and inland States.

	Years.	Maximum in Inches.	Mean in Inches.	Minimum in Inches.
St. Paul.....	19	49·69	25·43	15·07
Houlton, Me.	9	41·91	36·97	30·80
Burlington, Vt.	20	—	31·11	—
Hanover (Dart. Col.) N. H.	18	—	41·00	—
Cambridge Obs., Mass.	14	54·13	44·48	34·74
Providence, R. I.	24	53·27	40·05	29·51
Ft. Columbus, N. Y. harbor	19	65·51	42·13	29·80
Newark, N. J.	17	—	44·51	—
Baltimore	19	51·70	40·98	28·89
Philadelphia	12	54·85	42·34	35·00
Norfolk, Va.	19	74·16	45·18	19·32
Charleston, S. C.	12	65·31	48·29	33·98
St. Augustine, Florida	8		51·80	
Ft. Brooke, Florida	16	89·86	55·47	44·77
Augusta, Ga.	4	—	40·78	—
Huntville, Ala.	9	67·66	54·88	29·07
New Orleans	17	62·64	52·31	39·96
Albany, N. Y.	28	50·97	40·67	31·79
Rochester, N. Y.	20	59·00	39·44	17·84
Detroit, Mich.	13	38·49	30·07	21·51
Cincinnati	20	65·18	46·89	30·62
St. Louis, Mo.	19	65·36	41·95	20·89
Brownsville, Texas	6	56·30	35·17	20·76
San Antonio, Texas	8		38·77	
Milwaukie, Wisc.	7		27·20	
Muscatine, Iowa	10		44·33	
Athens, Ill.	10		41·80	

That comparative absence of moisture is one of the distinguishing characteristics of the climate of Minnesota the foregoing statistics conclusively demonstrate; and this comparison not only holds good with reference to the Atlantic but applies to most of our inland States.

TEMPERATURE.

The mean temperature of the climate of Minnesota is a number of degrees warmer than in corresponding latitudes in our Atlantic and New England States.

This remarkable increase of temperature, as we approach the central portion of this continent, constitutes one of its striking peculiarities. The following table is so arranged as to show the mean of temperature for the different seasons and year at St. Paul and other points on the same parallel of latitude.

	Lat.	Spring	Sum.	Aut.	Wint.	Year.	No. of years.
	°	°	°	°	°	°	
St. Paul.....	44 58	45·6	70·6	45·9	16·1	44·6	35½
Green Bay, Wisc.	44 30	43·5	68·5	46·0	19·9	44·5	21
Penetanguishene, Canada	44 48	39·2	66·0	45·2	21·7	43·5	1
Potsdam, St. Lawrence Co., N. Y.	44 40	42·9	66·8	45·4	19·8	43·6	21
Burlington, Vt.	44 29	42·7	67·9	47·8	21·6	45·0	21
Ft. Sullivan, Eastport, Me.	44 54	40·2	60·5	47·5	28·9	43·0	25
Castine, Me.	44 28	40·7	62·0	48·3	28·2	43·4	40

The foregoing statistics demonstrate the fact that at St. Paul the annual mean temperature is one or two degrees higher than at other points situated on the same parallel in the Middle and Eastern States, also, that its spring mean is from two to six, and its summer from two to eight degrees higher than that of other points situated on the same parallel. Its autumnal mean averages about the same, and its winter mean is from three to seven degrees.

The arrangement of the following table designates points having the same yearly mean of temperature as St. Paul, but situated in a lower latitude, and also in a striking manner shows the mean distribution of heat for the various seasons of the year.

	Lat.	Spring	Sum.	Aut.	Wint.	Year.	No. of years.
	° ′	°	°	°	°	°	
St. Paul.....	44 53	45·6	70·6	45·9	16·1	44·6	35½
Kenosha, Wisc.	42 35	40·1	65·3	47·6	26·7	44·9	8
Ft. Winnebago, Wisc. ...	43 31	45·5	67·9	46·0	19·8	44·8	16
Toronto, Canada	43 39	41·1	64·8	46·6	24·5	44·3	16
Cherry Valley, N. Y.	42 48	42·6	65·4	46·0	28·0	44·2	15
Williamstown, Mass.	42 43	41·5	66·4	48·2	22·9	44·8	4
Princeton, Mass.	42 28	40·7	65·8	48·8	21·6	44·1	2
Fayetteville, Vt.	42 58	42·8	66·1	46·4	20·9	44·1	6
Concord, N. H.	43 13	42·6	65·4	47·8	22·7	44·5	10
Hanover, Dart. Col., N.H.	43 43	38·1	62·8	43·1	16·1	40·0	8
Portland, Me.	43 39	42·8	65·2	48·1	24·7	45·2	22

The above statistics show the annual mean temperature of the climate of St. Paul to be the same as that of the Middle and New England States two degrees further south, and that its spring mean is from two to seven, and its summer from three to seven degrees higher than that of those States two degrees further south. Its autumnal mean averages nearly the same, and its winter range is from three to seven degrees lower. This subject is most forcibly illustrated by a reference to the isotherms of the Continent. The following table gives a familiar and forcible illustration of the climate of Minnesota, designating places which have the same mean temperature for the respective seasons of the year.

Spring. Mean Temperature, 45° 6.	No. of Years.	Summer. Mean Temperature, 70° 6.	No. of Years.
St. Paul.....	35½	St. Paul.....	35½
Boston, Mass.	20	Lowell, Mass.	7
Springfield, Mass.	2	Trenton, N. J.	5
Worcester, Mass.	7	Middletown, N. Y.	3
Kinderhook, N. Y.	17	Flatbush, L. I., N. Y.	24
Utica, N. Y.	9	Newburg, N. Y.	18
Cooperstown, N. Y.	16	Philadelphia, Penn.	10
Onondaga, N. Y.	16	Mifflinton, Penn.	16
Lewiston, N. Y.	18	Warren, Penn.	1½
Detroit, Mich.	13	Hudson, Ohio	7
Ann Arbor, Mich.	8	Oberlin, Ohio	5
Battle Creek, Mich.	5½	Chicago, Ill.	5
Chicago, Ill.	5	Beloit, Wisc.	6
Beloit, Wisc.	6	Portage City, Wisc.	16
Portage City, Wisc.	16	Pambina, M.T., Lat. 49° 7	12

Autumn. Mean Temperature, 45° 9.	No. of Years.	Winter. Mean Temperature, 16° 1.	No. of Years.
St. Paul.....	35½	St. Paul.....	35½
Portland, Me.	31	Houlton, Me.	17
Burlington, Vt.	6	Hanover, N. H.	3
Montreal, Canada	15	Williamstown, Vt.	13
Lake Simcoe, Canada W.	1	Montreal, Canada	15
Lowville, Lewis Co., N. Y.	19	Sault St. Marie	31*
Plattsburg, N. Y.	11		
Fairfield Academy, N. Y.	19		
Cherry Valley, N. Y.	15		
Ebensburg, Penn.	2½		
Smethport, Penn.	8		
Green Bay, Wisc.	21		
Manitowoc, Wisc.	21		
Baraboo, Wisc.	1		

The Isothermal lines of mean temperature for the season and year, as laid down by Lorin Blodget, Esq.,† indicate for Minnesota, in the vicinity of St. Paul, a mean spring temperature, corresponding to that of central and southern Wisconsin, northern Illinois and Indiana, southern Michigan, central and southern New York, northern Connecticut, and central Massachusetts. A summer mean corresponding

* See Neil's History of Minnesota. † See Blodget's Isothermal Charts.

with that of southern Wisconsin, northern Illinois and Indiana, southern Michigan, northern Ohio, central and southern Pennsylvania, and southern New York. Its autumnal mean with that of northern Wisconsin, central Michigan, northern New York, southern New Hampshire, Vermont, and Maine. Its winter, with northern Wisconsin and New York, central New Hampshire, Vermont, and southern Maine.

Those who have not attentively studied the isotherms of the Continent will be surprised to learn the extremes of latitude which they traverse. The lines indicating the mean temperature of 45° for spring, and 70° for summer, commence on the Atlantic coast, the former on the 43d, and the latter on the 40° parallel. They gradually incline to the north as we trace their course westward, until having passed the great lakes they turn abruptly to the north west, crossing the 45° at St. Paul, and reach their highest point on the 51st parallel in the British possessions; then, curving around, descend east of the Rocky Mountains, including in their circuit a vast area of country lying between them and the upper Mississippi valley, which has the same climatological features.

Referring to the isothermal charts which he had laid down, Mr. Blodget remarks, "It will be seen that the thermal lines for each season are thrown northward further, on passing Lake Superior westward, in the charts of this work than in those of the Military Report prepared by the author. At the time those were drawn the number of observations beyond the limits of the United States was so small that the full expression was not given to the statistics then used, in the fear that some correction would ultimately be found to apply to them, reducing the extreme northward curvatures they indicated. But a further collection and comparison warrants the position now given to the thermal lines, placing them further northward than before, and extending them in a course due northwest from Lake Superior to the 58th parallel. For the extreme seasons, Winter and Summer, this accurate diagonal extension of the thermal lines across the areas of latitude and longitude is very striking." How imperfect a criterion parallel lines form, by which to judge of the climate of a continent, is here manifest.

(To be Continued.)

REPORTS ON
SOME RECENT IMPROVEMENTS IN MATERIA MEDICA AND THERAPEUTICS.

By EDWARD H. JANES, M.D.,
OF NEW YORK.

II.

ANARCOTINE AS AN ANTIPERIODIC.

The prospect of an ultimate failure in the supply of quinine, or even the increasing expense attending its employment, is sufficient to induce the profession to hail with pleasure the introduction of any new remedy that may serve, in some degree, as a substitute for this world-renowned specific for intermittents of every grade and type. A number of remedial agents have already been added to the list of antiperiodics, each having its advocate by whom its claims are presented to the profession with the utmost confidence, and in the most favorable light. The employment of anarcotine as an antiperiodic is not altogether new. We learn from our standard works on materia medica that Dr. Roots, of England, was induced, by the bitterness of its salts, to employ it in intermittent fever, and that Dr. O'Shaughnessy, of Calcutta, obtained the happiest results from its use, considering its antiperiodic powers superior even to that of quinine. He gave it in doses of three grains three times a day, and never found it to produce narcotic effects, headache, nausea, or constipation, but to act powerfully as a diaphoretic. He gave it "with the full expectation of arresting the next periodic return of fever." The testimony of these two gentlemen seems to have attracted but little attention among the profession, yet recent experiments have shown that the article possesses sufficient therapeutic value to entitle it to more confidence than it has hitherto received. *The Indian Annals of Medical Science*, for September, contains an elaborate report of Dr. A. Garden, of Ghazeepore, addressed to the Deputy Inspector General of Hospitals, giving the results of six hundred and eighty-four cases of intermittent fever treated by this remedy, and tabulating them in various forms, so as to represent the severity of the cases treated, the duration of treatment, the amount of anarcotine used, economy of the drug, and various other points of interest. Before examining the details of this report a few words concerning what is already known of the natural history and properties of anarcotine would not be out of place. Anarcotine has been usually known by the name of narcotine, from the erroneous impression that it represented the narcotic principle of opium; though in truth when pure it contains no narcotic properties whatever; and hence it has been proposed to spell it with the prefix *a*, in order to correctly designate its real character. It is known as one of the crystalline constituents of opium, "obtained by extracting the aqueous extract with ether, which upon evaporation leaves it nearly pure." It is described as consisting of white, silky, flexible, acicular crystals, without taste or smell, insoluble in cold water and alkaline solutions, slightly soluble in boiling water and cold alcohol, more readily soluble in hot alcohol, ether, and the diluted acids, also in the volatile and fixed oils. With dilute mineral acids it combines to form salts of a bitter taste, in one of which it is administered generally in the form of a sulphate. Chemistry has given us four homologous varieties of this alkaloid, viz. the normal, the methylic, the ethylic, and the propylic anarcotine. Each of these has a different chemical formula, and when treated with caustic potash they yield respectively ammonia, methylamin, ethylamin, and propylamin. This, however, is a matter of more scientific curiosity than of therapeutical importance. Anarcotine, when administered in doses of gr. ss. to gr. i., acts as a tonic, increasing the appetite, and giving general tone to the system; by larger doses the action of the heart is increased, the pulsations become more frequent and fuller; and in still larger doses (gr. v. to gr. x.), it produces increased warmth of surface and diaphoresis. Nausea, giddiness, and sometimes vomiting have followed the administration of large doses, while some claim to have given it in doses of twenty, thirty, and even sixty grains, with entire impunity. This discrepancy may arise, perhaps, from the use of an impure preparation, or from the general state of the patient's health contra-indicating its employment.

The value of this article as an antiperiodic is what now claims our more immediate attention, and a brief abstract of Dr. Garden's report will enable us to judge, as far as the testimony of others is concerned, with some degree of intelligence in reference to this part of the subject. Dr. G. commenced the use of anarcotine during the prevalence of what he calls "a most severe, and fatal epidemic of fever," and during the months of October, November, and December, 1859, and January, 1860, he administered it to 525 patients, among which nine deaths occurred. In order to thoroughly test the value of the drug accurate notes were kept of 194 cases of quotidian and tertian intermittents, and these he has arranged in tables of different forms, from the examination of which we learn that in 154 quotidians the remedy failed in four, and in forty tertians it failed to cure in three cases, making the percentage of failures 3·6, or one in 27·71 in which the continuance of the symptoms after a fair trial made it necessary to change the treatment, from which he concludes that in this view the remedy is fully equal to quinine. Of the 150 quotidians cured the treatment did not commence till after the occurrence of the fourth paroxysm; and in tertians not till after the third or fourth. In the former the fever returned on an average 2·48, and in the latter 2·54 times after the first administration of anarcotine; though in nearly one-fourth of all the cases the first dose checked the fever so that it never

returned, and in nearly two-thirds of the cases treated the fever was cured after the return of the second paroxysm. These facts are considered sufficient, at least, to entitle anarcotine to rank after quinine as an antiperiodic. In an economical point of view the author's figures are plain and conclusive. In quotidians the average amount required in all cases, including the amount given on the first day on which the paroxysm did not return, was not quite one scruple; which, together with the amount taken during convalescence, made an average of a little over thirty-five grains a case. The average amount required in tertians was greater, being 57·8 grains. In all the cases of both types the average amount required to effect a cure was 22·7 grains, and that taken during convalescence was 16·3 grains, or in all thirty-nine grains per ease. In order to fully appreciate this part of the subject, it must be remembered that these notes were taken during the prevalence of a severe epidemic, in which many cases proved rapidly fatal when not treated, and all were more than ordinarily difficult to cure, and especially prone to relapse, making it absolutely necessary to continue the use of the medicine for some days after the cessation of the fever. It is not presumed that anarcotine is of equal value to quinine; but a remedy that fails in only 3·6 per cent. of all cases treated, and cuts short the fever before the occurrence of the third paroxysm, deserves at least the second place in the ranks of anti-periodics. Occasionally disagreeable symptoms were caused by large doses, such as nausea, giddiness, and vomiting. These for the most part were obviated by diminishing the dose, while the frequency of administration was increased. Of its value in the treatment of remittent fever Dr. G. has kept no records of his experience, but his general feeling is not so much in its favor. The doses used during this epidemic were as a tonic, gr. ss. combined with a small excess of sulphuric acid; and as an antiperiodic, grs. iss. to gr. iij. The tendency of the remedy to constipate the bowels made it necessary to commence the treatment with the administration of a cathartic, and the occasional use of some mild laxative. Such is the testimony of one whose large experience and careful observation eminently fit him to speak with intelligence on the subject, and which strongly supports the opinion formed by Dr. O'Shaugnessy and other medical officers many years ago.

AMAUROSIS BY INJURY OF THE SUPRA ORBITAL NERVE.

By HENRY D. NOYES, M.D.

It has long been observed that blows upon the supra-orbital region sometimes cause blindness. The special lesion has in certain cases been asserted to be simply contusion of the supra-orbital branch of the trigeminus nerve. On the contrary some pathologists declare the blindness must result from lesion within the eye.

Mackenzie discusses this point at some length, page 150, quoting from Beer, Morgagni, and others. He admits the possibility of the agency of the supra-orbital nerve, and offers the hypothesis that an irritation communicated to the brain by the injured nerve causes a "reflex disease, probably inflammatory, to be propagated to the optic nerve, and to other nerves, concerned in the function of vision." Other authors, whom it would be tedious to quote, invoke concussion or apoplexy of the brain, concussion of the retina, hæmorrhage within the eye, etc., as the explanation of the loss of sight.

Mr. Haynes Walton, in the second edition of his book, the "Surgical Diseases of the Eye," at page 34, goes into this subject. He had occasion to investigate the matter carefully, because called to testify in court in a claim for damages for a slight wound of the eyelids. The question of amaurosis depending immediately or ultimately upon injury of the nerve was raised by the plaintiff's counsel. Mr. Walton testified that in his opinion "mere injury of the nerve-branch on the head can have no effect on the function of the retina; that loss of sight, when associated with such lesion, is due to coincident injury of the eyeball." He also presents cases which he observed, where after such injuries blindness followed without external evidence in the eye to account for it, but in which by the ophthalmoscope he discovered detachment of the retina by hæmorrhage beneath it, also evidences of iritis, disorganization of the vitreous humor, choroidal atrophy, etc.

This subject was singled out for comment in a recent review of Mr. Walton's excellent treatise, and I have a case to record which bears directly upon the question at issue: viz. whether contusion of the supra-orbital nerve is competent to cause blindness without coincident injury of the eyeball, and without the intervention of inflammatory processes.

Dr. J. R., æt. about 48, five years ago was living and practising medicine in Central America. He had an attack of erysipelas of the face, during which he became delirious. At a time when unguarded and in delirium he rose from bed, and in moving about the room accidentally struck his forehead against the wall. The shock and pain startled him, and made him conscious of having received a blow. The next day he felt pain and swelling in the integument about the right eyebrow, and he remembered the accident of the previous day. This shows that the delirium was not profound. Under the effects of erysipelas his eyelids were closed, but when they could be opened he found his right eye totally blind. The interval elapsing from the injury to the discovery of blindness I have not recorded. I infer from the doctor's manner of statement that it was not many days, at the outside not more than two weeks.

The eye presented no outward marks of impairment; there were no evidences of inflammation; the pupil continued active; there were no muscæ, no phosphenes; there was no perception of light. The skin of the forehead and scalp, to which the right supra-orbital nerve is distributed, remained partially insensible for three years. For a year and a half past it has recovered normal sensation.

The doctor kindly allowed me to make a careful inspection of his eye with the ophthalmoscope. Before instilling a solution of atropine I noted the pupil to be a trifle larger than the opposite, not prompt in movement, but contractile, not perfectly circular; there is occasional divergent squint to a slight degree. By the most careful test I could obtain no evidence that this eye had the least perception of light. There remained no external marks of the injury in either scars of the skin, or irregularity of the orbital ridge. The movements of the globe were perfect, there were no unusual appearances in its external aspect. The pupil was dilated by atropine, and I carefully explored the interior of the eye with the ophthalmoscope. The media were perfectly transparent, no spots or striæ in the lens, no flocculi in the vitreous. The retina in situ, no abnormal appearances about the macula lutea. No transformations in the choroid; its tissue unimpaired by either atrophy or exudation. The optic nerve of a slight rosy tinge, without central excavation; with no diminution in size, there being no shrinking from it of the choroid. The branches of the arteria centralis not quite so large as usual, but the veins of a size corresponding to the calibre of the arteries; I scanned the nerve very critically, expecting to find in it the explanation of the blindness. I examined its surface by the upright image, the direct method, but could discern no evidences of atrophy, or other change of structure. I have seen not a few instances of atrophy of the optic nerve, and am familiar with the appearances they present, but between them and this I could establish no similarity.

Now what do the facts show, and what inferences can be drawn from them? There was a blow over the eyebrow, proved by the doctor's memory, and by the succeeding swelling. The supra-orbital nerve was injured, proved by the partial anæsthesia during three years afterwards. There was no violent inflammation in the eye, because the erysipelas abated soon enough to discover this fact.

Neither was there a hæmorrhage either into the vitreous humor or behind the retina; the proof against the former is that unless the clot occupied the whole vitreous it would not have caused total loss of perception of light, and had the blindness depended upon this, when the clot was absorbed, some sight would return. The same is true of apoplexies of the retina. Against hæmorrhage behind the retina the proof is, that after such a lesion the separation always persists in some degree, and can be discovered with the ophthalmoscope.

The loss of sight was not from subacute or chronic internal inflammation; such a process would not have caused the sudden and complete blindness, and it must have left traces in the vitreous humor, and in the choroid; moreover, all inflammatory symptoms were wanting; and they would have attracted the notice of an intelligent medical man.

Lastly there was no atrophy of the optic nerve—the signs of this state are briefly, extreme whiteness of its substance, diminution in size of the disc, shallow central excavation, excessive tenuity of the arteries with dilation of the veins, and often a ring of sclerotic surrounding the disc, made visible by the shrinking of the nerve. All these signs, which, if present, must have become strongly pronounced during five years, were wanting. The slight decrease in the size of the arteries was wholly unlike that in atrophy of the nerve.

Concussion of the retina remains. I do not see how this could have been confined to only one eye. Moreover, this condition, if it does occur, is regarded as usually of temporary duration, and followed by more or less complete recovery. The supposition of lesion of the brain by the accident, such as hæmorrhage or concussion, would seem to be negatived by the blindness being upon only one eye, and by the absence of all corresponding symptoms, as convulsions, stupor, paralysis, or pain. The delirium present at the time was of a mild type, and that the injury did not impair the cerebral functions is shown by the lucid interval of the next day, when the fact of having been hurt was remembered.

Up to this point I have argued the case with negative results. As to positive conclusions I have none to offer. I do not profess to explain the chain of sequence, but this case seems to me to prove that there is a direct, although occult connexion, between injury of the supra-orbital nerve and the functions of the retina. By direct I do not mean that no other tissue may be implicated, but that it is not necessary to suppose intra-ocular lesion.

This result does not invariably follow. The nerve may be severed, pricked, and bruised, without affecting vision, yet in other cases the contrary will follow. This result is not analogous to the destruction of vision by division of the roots of the fifth pair of nerves, for that is by sloughing of the cornea from impaired nervous supply enfeebling the nutrition. This case occurring in a medical man permits greater reliance upon the history of symptoms, and the profession are indebted for his readiness to permit his case to be examined, and to be recorded for the benefit of science.

The loss of sight was the direct result of the blow—it was immediate—it was total. No cause appears to explain it, save the injury to the supra-orbital nerve. Yet how to connect these facts understandingly is certainly very difficult. It might be alleged that the lapse of five years from the injury to the ophthalmoscopic examination renders it impossible to reason conclusively upon the cause of the loss of sight. Such an assertion might be admitted if there had been recovery of vision, but, since the patient continues blind, the lesion which produced blindness so suddenly at first must still be in force, and if within the eye, should be discoverable, unless it be the microscopic elements of the retina which have suffered disorganization.

278 Fourth Avenue.

The salaries of the Professors at the College de France, and at the Academy of Sciences, have been fixed at 7500 francs.

Reports of Hospitals.

NEW YORK HOSPITAL.

INJURIES OF THE HEAD.

THEIR NATURE AND TREATMENT, WITH ILLUSTRATIVE CASES, By D. B. St. John Roosa, M.D., and James L. Little, M.D., Resident Surgeons.

(*Continued from page* 138.)

FRACTURE OF THE SKULL, FOLLOWED BY INFLAMMATION AND SUPPURATION WITHIN THE CRANIUM.

I.—Mary J. McCulloch, æt. 7, was admitted Sept. 14, 1861. (Dr. Markoe, attending surgeon.) This little girl, with her sister, was precipitated to the ground, by the giving away of an old shed on which they were playing, falling a distance of about twelve feet. On admission a contused scalp wound of a triangular shape was observed over the right parietal eminence; the bone was not exposed, and on a careful examination no fracture could be made out. The wound was dressed with cold water, and as soon as it began to granulate Peruvian balsam was applied, and the edges brought together with adhesive straps. Patient complained of no pain in her head, and was playing about the ward the day after the injury. On the fifteenth day the wound had almost entirely closed, and she was discharged apparently cured. About a week after her discharge she was again brought to the hospital. Her parents gave the following statement of her condition while at home:—The second day after her discharge she ate cakes, candy, and very heartily of meat, which resulted in the overloading of her stomach, and vomiting; she became very irritable and somewhat feverish at night, and on the third day had a chill, followed by profuse sweating: no medical attendance was sought for, and she gradually grew stupid, and on the sixth day had a severe convulsion followed by coma; she was then brought to the Hospital. On admission her symptoms were those of compression of the brain:—Coma, dilatation of both pupils, paralysis of left arm and leg; pulse 120, hard and irregular; urine and fæces escaping involuntarily. One xamination a puffy, semi-fluctuating tumor, about two inches in diameter, was found over the right parietal bone, and near the wound. The wound had almost entirely healed. A consultation being called, it was decided to make an incision through the tumor down to the bone. This was done, and a collection of pus was found under the pericranium, and a careful examination revealed a circular fissure, about an inch in diameter, without any depression, a little above the original wound. The surrounding bone was dark and dry in its appearance. A button of bone was removed by a small trephine from the outer edge of the fracture. As soon as the trephine was removed pus oozed up through the fissure made by the instrument. The removal of the piece of bone gave exit to about ℥ iss. of very thick, fetid pus. The bone for some distance surrounding the fracture was very dry, and softer than natural. Enough bone was removed by the rongeur, to leave an opening about an inch and a half in diameter. The collection of matter seemed to be situated between the dura mater and skull, the brain substance not being exposed. The operation was followed by no alleviation of the symptoms, the patient surviving four hours. It is to be regretted that no post-mortem examination could be obtained of this case, the parents and the coroner refusing to grant one.

FRACTURE OF THE VAULT AND BASE OF SKULL; NO DEPRESSION.—CONSTANT RECURRENCE OF CHILLS.—DEATH ON FORTY-FIRST DAY.—AUTOPSY.

II.—Annie McCulloch, æt. 9 years, was admitted September 14, 1861 (Dr. Markoe, attending surgeon), having received her injuries at the same time, and in the same manner, as the foregoing case. On admission a semicircular scalp wound, of about two and a half inches in length, was found, situated over the vertex, the pericranium being uninjured. On careful examination no fracture could be

detected. She was suffering from the following symptoms:—Coma, pulse sixty, surface cool, pupils moderately contracted, respiration slow but regular, and *vomiting*. She was placed in bed, when heat was applied, and a stimulating injection given. Patient reacted promptly, and for the first eight days appeared to do pretty well. Cold water dressings were applied to the wound, milk diet given, and the bowels kept free. On the 8th, patient was somewhat worse, quite fretful, and for the few last nights quite restless, being disposed to cry out in her sleep; pulse 120 and small. On examination of her head some tumefaction appeared over the left temporal bone, about an inch below the wound. A free incision was made, allowing the escape of a small quantity of pus. A mercurial cathartic was ordered, and also a blister to the nape of the neck. On the tenth day the patient did not seem to be improving; her pulse 120, weak and irregular; pupil of right eye somewhat dilated, while the left was contracted; she had besides a severe spasm, followed by paralysis of the right arm. 12th day.—Patient had a chill, which lasted several minutes; this passed off and she fell into a sleep. The day following she had two chills. A swelling was then observed over the left parietal eminence; this was opened, allowing the escape of some pus; the bone exposed by this incision was observed to be dry and yellowish. From this time the patient had one or two chills every day, and what is remarkable the left cheek during the chill would be colder than the right, and during the febrile excitement following the chill the left cheek would be redder and warmer than the right. This was observed to occur during every paroxysm. Patient's intellect remained tolerably good; she recognised her friends; she was, however, very irritable, sleeping but little night or day. The wounds did not seem disposed to heal, having a dry and glazed appearance. These symptoms continued, patient at times appearing to be better; sometimes, after a chill, getting up out of bed and dressing herself, would walk about the ward, it being impossible to keep her in her bed without tying her down. Several times there would be an intermission of the chills for two or three days. No collections of matter were discovered, except a small abscess over the sacrum, which was opened, and gave no further trouble. She also complained at times of severe pains in her elbows, knees, and other joints; no tenderness, however, or distension of them was noticed. During this time her appetite was pretty good. In the fifth week severe bronchitis set in, and she died of chest symptoms on the 41st day after the injury.

Autopsy.—The coroner utterly refused a post-mortem examination in this case, but the father was finally persuaded to allow an examination of the head to be made. The examination revealed a fracture, beginning at the upper and central portion of the os frontis, running outwards and downwards to the petrous portion of the left temporal bone, without any depression. A small clot of blood, about the size of a ten-cent-piece, surrounded by pus, was found beneath the dura mater under the squamous portion of the left temporal bone, near the line of fracture. The brain substance was softened around this clot. No fluid found in the ventricles, and no signs of inflammation of the meninges were detected. The various joints of the body were punctured, and no evidences of purulent collection were found. It is to be regretted that a more thorough examination of the body was not permitted.

The most important features of this case may be summed up as follows:—1st. The paralysis of the upper extremity of the right side only; the dilatation of the pupil of the right eye, without any marked paralysis of the face or lower extremities. 2d. The constant recurrence of the chills, followed by fever, lasting from half an hour to one hour, having sometimes only one, and at others as many as seven during the day, and *at no time was any sweating noticed after the fever.* 3d. The chill and fever appearing more markedly on one side of the face than on the other. 4th. The great irritability: being fretful, peevish, and restless during the whole course of treatment.

Reports of Societies.

SURGICAL SECTION.

Stated Meeting, Jan. 24, 1862.

DR. JAMES R. WOOD, CHAIRMAN.

DISCUSSION OF DR. GEO. K. SMITH'S PAPER ON THE RELATION OF THE INSERTION OF THE CAPSULAR LIGAMENT OF THE HIP-JOINT TO INTRA-CAPSULAR FRACTURE.

(*Continued from page* 140.)

Dr. W. R. Donaghe stated that he fully agreed with the first four propositions of Dr. Smith's paper, and was happy to have an opportunity of expressing his appreciation of the obligation under which he had placed us all by settling, after great and laborious research, points about which anatomists have so long differed. To the fifth and sixth propositions, however, he could not so fully subscribe. The fifth proposition was as follows:—"The line of union in a given specimen of fracture of the neck of the femur, cannot be said to indicate the exact position of the line of fracture, if the neck suffered loss by absorption before union occurred; since it is impossible to determine that the loss of structure was entirely at the expense of either fragment of the neck." In the negative of this, continued Dr. D., I would argue that a specimen (and the existence of such is undisputed) in which the neck has been entirely removed by absorption, and the head is closely united to the shaft, affords the strongest presumptive evidence, if not indeed positive proof, *that the line of fracture was intra-capsular.* In such a case the fracture must have been extra-capsular; partly within and partly without the capsule; or intra-capsular.

It could not have been extra-capsular; for, firstly, in the numerous cases of this variety that have been recorded with illustrations by Robt. W. Smith, the neck is exhibited as retaining nearly its full original length. This is what we should expect. Though the vessels are severed which pass into it from the continuous shaft, yet there still remain sufficient sources of blood-supply to maintain, in the great majority of cases, its integrity. The capsular ligament, commencing at the margin of the acetabulum, sweeps outwards to its insertion, from which irregular line some of its deeper fibres are reflected upon the neck as far as the edge of the articular face, forming a true periosteum to the neck, designated by Dr. R. W. Smith as its "cervical ligament." The synovial membrane lines the inner surface of the capsule, and is thence reflected upwards on the "cervical ligament" as far as the head of the bone. Thus the elements of nutrition are supplied to the neck, and it retains its form. Secondly, extra-capsular fracture is, according to Malgaigne and R. W. Smith, accompanied by fracture with displacement of one or both trochanters. If the specimen above quoted had been an extra-capsular fracture it should present evidences of the associated injury; but none are to be seen.

Could such a specimen have been the result of a fracture partly within and partly without the capsule? I cannot recall any cases in which this special variety has been carefully described from post-mortem examination. Its existence seems to have been assumed as an anatomical possibility rather than proved by either symptoms or autopsy. In such a fracture we may assume that a large part of the neck would remain connected with the head of the bone, and that the conditions of nutrition of that fragment would be analogous to those of the neck in the extra-capsular form of fracture. The line of fracture (to bring it into the class partly within and partly without the capsule) must cross the posterior aspect of the neck *outside* of the insertion into that face of the normal capsule (which insertion is usually midway of its length). The synovial membrane, guided by the still attached posterior insertion of the capsule, covers the fragment of the cervix connected with the head of the bone. This fragment is also covered by the "cervical ligament" which is continuous with the gene-

ral capsule along the line of its posterior insertion into the neck. By these two structures the nutritive wants of this fragment are supplied, and it is placed beyond the probabilities of absorption. It must also be remembered, in this connexion, that the absorbing powers of the head are feeble. The best histologists, Bowman, Kölliker, and Morel, have never been able to detect lymphatics in bone. *We have then no right to claim their aid. We are shut up to the veins as the only known absorbent agents in bone.* Could that small solitary vein that runs back in the ligamentum teres cause the disappearance of nearly an entire femoral neck? I would not deny it some absorbing power. It is well known that in intra-capsular fractures that small portion of broken neck which remains attached to the head often disappears up to the level of the margin of the acetabulum, and, in very rare instances, the entire head has disappeared; but in these cases the synovial membrane covering the portion thus absorbed was cut off, by the direction and completeness of the fracture, from continuity with the distal part of that membrane, which alone could supply its vessels. Hence, it added nothing to nutrition. In this fracture, partly extra-capsular, the reverse is true. To quote Dr. Geo. K. Smith's words, "absorption is held in check by the antagonistic force of an abundant nutrition." But Dr. Smith argues that "there are lymphatic vessels in the synovial membrane covering the ligamentum teres, which may become active agents of absorption." It is true that the ligamentum teres is covered by a reflection of the synovial membrane, but it is equally true that the articular face of the head of the femur is not so covered. It is now an acquired fact of anatomy that the synovial membrane does not extend over the cartilaginous, articular surfaces. What could the lymphatics, then, of the synovial membrane folded around the ligamentum teres, do, being obliged to act from a distance upon a head and neck from which they are separated by a thick plate of articular cartilage? Again, in order that lymphatic vessels may absorb effete atoms they must be in immediate contact with such atoms; they must be *interstitial*. Lymphatics of the synovial membrane, then, can only absorb elements of the synovial membrane, in which they are imbedded. They could not even absorb the component elements of the ligamentum teres, which they envelop. If this power be claimed for the lymphatics of the synovial membrane that covers the fragment of the neck still attached to the head, the same reply may be made, viz. that *being on the surface*, and not permeating the bone, their absorbent power cannot extend to the bone. This difficulty is still further increased by the interposition between them and the bone of the "cervical ligament." Moreover, the fact, already enforced, that in extra-capsular fracture, the neck, by the nutritive power of the "cervical ligament" and the synovial membrane, retains most of its length, shows that they contribute to nutrition and not to absorption. In the fracture partly within and partly without the capsule these two structures are equally in contact with that portion of the neck joined to the head, and contribute rather to its integrity than its removal.

The specimen, then, which we took as a text, cannot have been a fracture partly within and partly without the capsule; we have seen that it was not extra-capsular; it must have been *intra-capsular*. May we not, then, substitute Dr. Smith's fifth proposition by asserting *that a line of union of a head immediately to the shaft proves an intra-capsular line of fracture?*

The sixth proposition of Dr. Smith is as follows: "Under favorable circumstances fractures of the neck of the femur, external to the capsular ligament, unite readily by bone; so also do fractures which are partly within and partly without the capsule; and it is highly probable that fractures within the capsule, which are followed by absorption, are sometimes united by bone, after the process of absorption has reached a point external to the normal capsule, where bony material is supplied; but this, if it ever does occur, can never be proven; for if the line of union be partly without the normal capsule, it is impossible to determine that the fracture was entirely within it, and we can never be positive that bony union of intra-capsular fracture has occurred until a specimen is presented in which the line of union is found to be entirely included by the normal capsule."

In opposition to the statement that "it can never be proven that a fracture within the capsule is ever united by bone after the process of absorption has reached a point external to the normal capsule," I have attempted to show that a line of union entirely outside of the capsule proves an intra-capsular fracture, which has united by bone. If this be true the test that Dr. Smith proposes, requiring a line of union entirely "included by the normal capsule," to prove bony union of intra-capsular fracture, cannot be admitted. If my view be correct, *bony union of intra-capsular fracture has been proved by specimens in which the line of union is entirely without the capsule.*

I think it is such specimens which shadow forth the truth in this much-disputed question. That an intra-capsular fracture, *with impaction*, might form an intra-capsular line of bony union, seems possible, but the fact has never been demonstrated. Under any other circumstances than those of impaction the difficulties in the way of bony union within the line of the normal capsule seem insuperable.

May we not assert, then, as the true statement of this matter, that *intra-capsular fracture of the neck of the femur never can present a line of bony union entirely included by the normal capsule, unless in cases of impaction, and that the possibility even under these circumstances has not yet been demonstrated; but that intra-capsular fractures have united by bone, and may again so unite when the inner fragment has, by absorption of the femoral part of the neck, been allowed to come wholly or partly in contact with that part of the femur which is extra-capsular, and for this reason affords abundant bony material?* When such a change in the relation of the fragments has occurred the analogy between their position and that of the fragments in fracture of the anatomical neck of the humerus becomes striking. In this latter form of fracture, when there is impaction, bony union almost always occurs; and even when there is no impaction bony union is frequently the result. (*R. W. Smith, Nélaton, Cloquet.*) "The reparation of the injury is accomplished principally by the lower fragment, which throws out matter in great profusion." (*R. W. Smith.*) The power in the humeral shaft of affording reparative material cannot be greater than that of the femoral shaft, and, the relations of the fragments being now identical, why should not bony union occur in one as it is known to do in the other?

Progress of Medical Science.

PREPARED BY C. Y. SWAN, M.D.

FRACTURE OF OS BRACHII FROM MUSCULAR VIOLENCE.

Pierre, a reaper, aged 35, of lymphatic temperament and robust constitution; muscular system of normal development; has always enjoyed excellent health, and no hereditary predispositions. Sept. 24, 1861.—Pierre drank with some comrades in a tavern, when one of them proposed to play *tourner poignet*, and here is what followed:—The two tilters seated themselves face to face at a narrow table. Their elbows rested on the table, with forearm flexed at right angles on the arm, and right hand mutually seized. The two right hands thus grasped stood almost perpendicularly from the table. The strongest was to reverse the hand of his adversary, but without jerkings, and solely by the effect of a continued muscular contraction. Pierre had to contend against a young man of a force nearly equal to his own; so the two continued for some moments without failing, when *tout à coup* a crack was heard—Pierre's right hand fell upon the table in excessive pain. The surgeon

called found all the signs of a fractured humerus—deformity, crepitation, pain, and inability to move. The fracture was situate near the superior third, on a level with the insertion of the deltoid, and a little under the insertion of the great pectoral and dorsal; it seemed to be nearly transversal. There was no apparent ecchymosis. Consolidation perfect after thirty-five days, and no deformity.—*L' Union Médicale.*

BRUITS CAROTIDIENS.

M. Marchand believes that the *bruits carotidiens* under puberty are not abnormal, as his examination of forty-five children (eighteen girls, twenty-seven boys) composing a village school goes to prove. The youngest girl was four years old, and the oldest thirteen, but had not yet menstruated. The most of them were of strong constitution, their freshness of complexion testifying to excellent health; only three of the eighteen were sick—one with rheumatism, the second had a contraction of the leg, and the third a lachrymal fistula: but notwithstanding seventeen of them presented the *souffle carotidien;* among fourteen it was a continuous *souffle*, strong, at times rude; in three cases there was a double *bruit de souffle;* in a little girl of ten years, very vigorous, a *timbre musical.* The pulse in these children varied from seventy-six to one hundred and ten. As to the boys the youngest was four years old, and the eldest twelve. All were in good health and all furnished the *bruit carotidien;* in four it was musical; in six a *souffle intermittent;* in seventeen a continued *souffle;* pulse varied between eighty-eight and one hundred and twenty.—*Gazette Hebdomadaire.*

PROPHYLAXIS OF DIPHTHERIA.

M. Loiseau has had twenty years' experience in *tannaging* the throat for the prevention of diphtheritic accidents and croup, and states that his treatment has been very successful. When diphtheria is epidemic all adults, on feeling the slightest *mal de gorge*, should inmediately gargle with an aqueous solution of tannin every fifteen minutes, occasionally swallowing some drops, in order that every part of the throat may be submitted to the agent's action. If after twenty-four hours of this simple medication no amelioration is perceptible, an alcoholic solution of the same substance may be used. The trouble not yet receding, add to the above six or eight grammes of tannin, one or two grammes of chloroform, and eight grammes of alcohol. If this fails have recourse to the etherial solution of tannin. In treating a child not old enough to gargle, make it drink very little quantities of one of the above solutions, and at the same time blow some powdered tannin into its throat. The strength of the etherial and alcoholic solutions must of course be in keeping with the age and susceptibilities of the patient.—*Journal de Médicine et de Chirurgie.*

American Medical Times.

SATURDAY, MARCH 15, 1862.

THE CLOSE OF THE WINTER SESSION.

The Winter Session in our medical colleges has closed, and there has been the usual accession of recruits to the ranks of our profession. At the commencement of the lecture season it was supposed by many that the attendance of students would be exceedingly small, and but little encouragement would thus be offered to those whose duty it was to teach. We are now happy to state that such expectations have fallen far short of realization; although some of our smaller colleges in the country have been compelled to close for want of patronage, the metropolitan schools have registered not far short of the usual number of matriculants. The condition of war in which our country has some time past been involved, has developed a branch of study in our various colleges which heretofore was altogether lost sight of; we refer to Military Surgery. Lectures on this branch have been given during the fall and winter courses in all our principal colleges throughout the country, and have generally been well received. They have been attended, not only by the student and practitioner, but also by very many of our army surgeons. The classes in attendance, during the past Winter in New York, have given every evidence of studiousness. Not only have the College duties been well and faithfully performed, but the dissecting rooms have had their share of occupants, and the wards of the Hospitals have been thronged. Several of the teachers have been so stimulated by the student's desire for improvement, that they have inaugurated private courses upon important branches, and the success which they have met will, we hope, render such instruction a permanent feature. The final examinations have been, judging from the testimony of the different examiners, very creditable, and would fain lead us to expect great things from our younger brethren. We would refrain from mentioning any particular individuals who distinguished themselves by their answers, inasmuch as it might place in an unenviable light very many of those who have already claimed for themselves the honor of having passed the "most brilliant examination." It is curious to note how many of such there are in every class of graduation.

The usual number of prizes have been distributed throughout the schools, and there can be no doubt that the system so lately inaugurated is in every way conducive to the welfare of the student, by the impetus which it gives him to increased exertions. The prizes, for the most part, are liberal in their design; and those who have taken a share in their institution deserve the commendation of all who strive after the elevation of the status of medical learning.

It may not be inappropriate at this time to speculate on the different courses which will be taken by those who have become so recently entitled to the honors and privileges of our profession. The inducements for emolument which the army holds out will be sufficient to tempt a great many to enter the service, when opportunities are offered for so doing; some of these will doubtless remain attached to the army even after the close of the war, while others will commence regular practice. The requirements for entering the army are such as to guarantee competency on the part of the successful competitor; and we consequently can recommend such a position to every young man as an honorable and distinguished one. The majority of our newly made physicians will locate themselves at once, but we regret to say will soon, from want of patronage, become an easy prey to disappointment and discouragement. This, however, is the common lot of all beginners; but especially does it belong to that class who are wont to neglect hospital advantages in order to save time. Some will seek admission into our hospitals, and adopt a truly reliable plan for rendering themselves qualified for entrance into general practice. Others will take a tour through Europe, in order to follow the celebrities through their wards. The alleged advantages of foreign cities are, we are forced to believe, more imaginary than real; this is especially the case with medical students. Fresh from the lecture-room, they are totally

unprepared to appreciate their real wants, and are easily led to adopt unqualifiedly the peculiar hobby of each clinical teacher. Then again, the chances are that they will pay most attention to all those points which they will find of the least practical utility in their future career. The case, however, is vastly different with him who has been already engaged in practice, or is determined upon a specialty. In either case a definite object is in view, and the proper foundation laid for the appreciation of truly useful knowledge.

The time, however, has come when Americans should begin to look seriously at home for advantages which older cities have so long laid claim to; every physician and student especially should first improve the facilities which are offered to him by the numerous large and well regulated hospitals throughout our own country. We doubt not that many, if they should take the trouble to look it up, would be astonished at the amount and variety of disease which can be seen in our very midst. And this leads us to ask the question seriously—Why are such advantages not sought after more by those who take an interest in clinical study? The results of treatment in our Hospitals can certainly compare with the best institutions of the kind in any country. We are inclined to think that the only essential difference that exists between the mode in which clinical study is prosecuted in America, as compared with the same study in other countries, consists in our want of teachers. Teachers who are competent to give thorough and systematic courses of instruction are much needed in all our large institutions. When we have succeeded in establishing such a system there will be no want of patronage. The right men are among us; all that is needed is, that they direct their talents in this new channel.

It will, indeed, be some time, no matter what particular course the young graduate may take, before he becomes fully alive to all the toils, anxieties, responsibilities, and unrequited labors, which are our common lot. He will not, however, regret at the end the course he has taken; he will not wish his work any the less severe because his compensation has been meagre, or any the less benevolent because he received so few thanks.

THE WEEK.

One hundred of the sick and wounded of the Burnside Expedition arrived at this port last week in charge of Dr. Hitchcock, of Massachusetts. Although many were unable to walk without assistance when they started, yet so beneficial was the voyage that when they arrived here but fifteen required assistance. We have several times called attention to the importance of establishing military hospitals in the vicinity of New York for the accommodation of the sick soldiers of the north and east. Large numbers of invalided troops now crowd the hospitals in the more immediate vicinity of the seat of active military operations, who would be greatly benefited by being transported by sea to permanent hospitals, easy of access by water, located in the most salubrious district, and having all the modern improvements as regards room, ventilation, nursing, etc. The vicinity of New York affords sites for the location of military hospitals unsurpassed for healthfulness and accessibility. The banks of the Hudson, with their various elevations, afford innumerable sites where the health-giving influence of natural scenery would combine with artificial appointments in an extraordinary degree. A pavilion hospital, located on the Hudson, would do more to restore the health of our northern troops, now languishing in the temporary structures at the seat of war, than all the drugs in the country. We believe it would have been a matter of great economy, in saving of money as well as life, if Government had established permanent hospitals at such points early in the war. But the necessity for these institutions is now daily, we fear alarmingly, increasing. The active operations of the expeditionary corps on the southern coast are daily adding to the number of sick and wounded, whose convalescence will depend much, or altogether, upon the care they receive, and the conditions which surround them. And the final movement of the army of the Potomac adds tenfold weight to our suggestions. We are aware that Government has located hospitals at Philadelphia, which are fulfilling the purposes for which they were designed. But there is need of larger hospital facilities, and that need is liable at any moment to become imperative. No time should be lost to provide against these prospective wants of our army.

—

We hear from every quarter of the vast field of our military operations the warmest acknowledgments of the timely aid which the U. S. Sanitary Commission affords to our advancing armies. From Ship Island to the remotest camp in Missouri come numerous testimonials of the value of the labors of the Commission, in providing for the wants of the sick and wounded. The public alone support this arm of Government service, and it is but right that they should know of its doings. Does the Commission give to the country sufficient information of its operations? We think not. It would quicken the public feeling to know of the wants of the army at different points, and to learn how far those wants have been supplied. We believe the Commission cannot do a better act than to instruct its Secretary to furnish to the public prints some of the reports of its agents.

—

In this number we commence the publication of a series of papers on the Climate of the State of Minnesota, with particular reference to its adaptation to consumptives. The author, Dr. George Lewis, was formerly a practising physician of this city, who was compelled to relinquish a large and lucrative business on account of the development of pulmonary tuberculosis in his own person. He was led to make trial of a residence in Minnesota, and has found the influence of that climate highly beneficial. His attention having been thus directed to the peculiarities of the climate of that State, he has embodied his investigations in the papers referred to. The profession have long been in want of reliable information in regard to the alleged advantages of this climate to the consumptive. In the papers of Dr. Lewis that information will be furnished by one who brings to the investigation of the subject a discriminating mind, long accustomed to scientific studies.

—

The Legislature of the State of New York has passed the following act to prevent the adulteration of milk, and prevent the traffic in impure and unwholesome milk.

1. Any person or persons who shall sell or exchange, or expose for sale, or exchange, any impure, adulterated, or unwholesome milk, shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than fifty dollars, and if the fine is not paid shall

be imprisoned for not less than thirty days in the penitentiary or county jail, or until said fine and cost of suit shall be paid.

2. Any person who shall adulterate milk with the view of offering the same for sale or exchange, or shall keep cows for the production of milk for market, or for sale or exchange, in a crowded and unhealthy condition, or feed the same on food that produces impure, diseased, or unwholesome milk, shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than fifty dollars, and if the fine is not paid, shall be imprisoned for not less than thirty days in the penitentiary or county jail, or until said fine and cost of suit shall be paid.

3. Any person or persons who shall engage in or carry on the sale, exchange or any traffic in milk, shall have the cans in which the milk is exposed for sale or exchange, and the carriage or vehicle from which the same is vended, conspicuously marked with his, her or their names, also indicating by said mark the locality from whence said milk is obtained or produced, and for every neglect of such marking, the person or persons so neglecting shall be subject to the penalties expressed in the foregoing section of this act. But for every violation of this act, by so marking said cans, carriage, or vehicle, as to convey the idea that said milk is procured from a different locality than it really is, the person or persons so offending shall be subject to a fine of one hundred dollars or imprisonment in the penitentiary or county jail, or both, in the discretion of the court.

4. This act shall take effect immediately.

We may congratulate the people of this city that a blow has at last been struck at the iniquitous system of milk-adulteration, which has annually largely increased the mortality among children. We hope it will not be allowed to remain a dead letter on the statute books.

Reviews.

Clinical Lectures on the Diseases of Women and Children. By Gunning S. Bedford, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children, and Clinical Obstetrics, in the University of New York, etc. Seventh Edition, carefully revised. New York: William Wood, pp. 653.

The *seventh* edition of this work has just been issued, a fact which more strongly than words attests its popularity with the profession. No medical work in our language has so rapidly run through repeated editions. But we must add to this accumulative evidence of the value of the work the announcement that it has passed through a French translation at Paris, and is now being translated into German at Vienna.

The Half-Yearly Abstract of the Medical Sciences: No. 34. Philadelphia: Lindsay & Blakiston.

The American edition of this semi-annual is now uniform with the London edition. It embraces a large scope of periodical medical literature, and may be regarded as a complete reflex of the advance which is made in all departments of the Medical Sciences.

M. Forcher, of the Hôtel Dieu, practises the following method of local anæsthesia in cases of incurved toe nail, and with, we are told, complete success:—"A ligature is tightly applied around the second phalanx of the great toe, and then lint soaked in chloroform is laid upon the nail for two or three minutes before the operation is performed. Two patients thus operated upon felt no pain, but only a slight sense of tickling."—*Brit. Med. Jour.*

BELLEVUE HOSPITAL MEDICAL COLLEGE.

VALEDICTORY ADDRESS

AT THE COMMENCEMENT OF BELLEVUE HOSPITAL MEDICAL COLLEGE.

By PROFESSOR GEORGE T. ELLIOT.

Gentlemen of the Graduating Class! Brother Physicians now! Fellow Students always!—This evening's ceremony has changed your relations to our College, and given you a new social position. The hour has come when the indulgence and freedom of the simple student life must yield to the criticism and self-denial interwoven with your future labors. It is a solemn moment. The brief span of life is measured by such events—bright and roseate in anticipation—and hallowed in the past by the choicest tints of memory. Prepared by study, tested by examination, you are now enrolled in that army of the defenders of life who battle with disease in every climate, in all seasons, at all times. Bound together by the same aspirations, the same trials, the same necessities, there is no brotherhood more truly democratic, no republic where prizes more certainly reward individual effort. Your future rests with yourselves, and in that future among your proudest recollections must be those of this eventful year. A year which with all its sadness, and all its desolation, may be the harbinger of happy days, since amid the shock of revolution, the overthrow of political schemes, and the destruction of material interests, those elements of character which make the true wealth of nations are crystallizing anew in resplendent shapes which may challenge the admiration of History.

At the time when the national calamity was the greatest, at the time when the prospects of our enterprise were the gloomiest, encouraged by the Commissioners of Charity and Correction, and the Trustees—some of whose names are familiar in your mouths as household words—we laid the foundations of that college from which you now issue as the first graduating class. Confident in the future of our country, firm in our conviction that the underlying principle of all true medical education rests on the development of the student's faculties for enlightened observation—that demonstration was to the study of medicine what action is to oratory—we have been rewarded this year by the presence of an attentive, enthusiastic class of one hundred and three students, and by the best assurances of its rapid increase in the next.

Determined to deserve success, and aided by the liberality of our Trustees, we declare that our labors during the past winter presage those results which we believe must spring from the alliance of medical teaching with so vast a field for clinical demonstration.

Generous-hearted, noble New York, so busy and so powerful, receives within her gates that steady tide of Emigration, which, purifying itself by the deposit of the effete, the unfortunate, or the worthless, in living streamlets vivifies the land. The aged, the sick, the imbecile, the hopelessly depraved, borne by that mighty tide, as our own Mississippi bears in its waters foul and useless burdens (exponents of its force and susceptible of filtration), are here the objects of ceaseless care and unwearied solicitude. In the suburbs of our city, on the margin of a broad river whitened by the sails of a sleepless commerce, there may be seen the noblest range of buildings in the state, where a thousand windows sparkle in the cheering rays of the sun as they stream into wards devoted to the solace of every human woe—"Where hopeless Anguish pours his groan, and lonely Want retires to die."

You know those places well. There, in the shadow of those vast Hospitals, have you been armed for your struggle with disease. In these wards, by those bedsides, have you seen the patient application of the searching analytical laws by which we seek to discover the essentiality of disease. There you have seen the physician's triumph in success from the joy of convalescence; there you have seen his comfort after failure in the absolute proof of a correct dia-

gnosis, and the employment of the best resources at his command. "By medicine life may be prolonged, yet Death will seize the doctor too."

Your professors have carefully selected for your study cases which represent the types of disease incident to all classes, both sexes, different ages, and special contingencies. They have lifted the mask from diseases, protean in character, that you might again and again recognise the familiar features; and they have taught you to interpret that wonderful language, in which one organ when diseased appeals for aid through another which may be healthy. Passing from the curable to the incurable, from the clearly defined to the obscure, they have pointed out that which has yet baffled investigation, and have shown you with what masterly strategy and admirable appliances modern science passes on to future conquests.

It cannot be that men, educated as you have been, will falter in the strife. It cannot be that society will not reap from your labors a reward for the performance of its charitable duties. The tax-payer of New York may owe his life in a distant village to the skill acquired at the bedsides of Bellevue. Nor do the results of thorough hospital training stop with the immediate benefit to the practitioner or his patient. Where such a man goes interest is awakened, ambition aroused, routine broken, and the whole cause of education developed. Oh! may you be worthy of such a future, and look back on a life brightened by high endeavor, and honored by noble results! But never can you hope to penetrate the mysteries of disease, and worthily interpret their meaning by mere force of intellect alone. For sorrow there must be sympathy—for despair, courage—for inexperience, advice—for rashness, warning! The throbbing heart must feel that with the physician come safety and relief. In no other way will it unburthen itself. The true physician can neither be a stoic nor a puling sentimentalist. His judgment, skill, and sensibilities must go hand in hand in the light of his experience to the diagnosis of mental as of physical suffering. But how sublime, how touching a spectacle is that of humanity in all its gradations, from the throne to the hovel, swaying together, and reaching a common level before the same emotions. In the spacious halls of Windsor Castle, guarded by the best sanitary precautions of the age, the Prince Consort of England, in the prime of life, succumbed to that fever which it is the pride of sanitary science to avert; while but a moment later the throng of miners in Hartley Colliery perished from one of those accidents which no engineering skill can positively prevent, and a village became desolate. Struggling through cold courtly conventionalities the widowed Queen calls aloud to the widowed peasant, and their voices mingle in the diapason of a common lamentation. From the chamber of death, through the house of mourning, the physician daily passes to the contemplation of the purest joys which bless the pilgrimage of men. He sees the humble home illumined by the smile of a contented spirit, and finds envy enthroned amid luxurious decorations. The extremes of the social scale meet him in the same spirit. He listens to the simple recitals of magnanimous self-denial, and to the fretful whims of pampered self-indulgence. No Asmodeus ever saw society so truly as it is. No other profession ever brings man so unreservedly in contact with his fellow man at every step of life from the cradle to the grave. These influences form the character of the true physician, and make him tolerant, liberal, forgiving, humble. To him, more than to any other man, belongs the blessed privilege of explaining faults of character, not only by faults of education, but by the influences of disease so often lurking in the attributes of health. Like Ithuriel, he touches with his spear the evil spirit poisoning the brain, and reason once more resumes her sway over the troubled mind. From the study of these influences, and from the daily recognition of their effects in the sins of omission and commission, the physician sees further than others can possibly be expected to see into the grand mystery which surrounds the reconciliation of Infinite Justice with Infinite Mercy. For the honor of human nature be it said, that no man, conscious of his own failings, can long pursue such a study without being purified from misanthropic tendencies, and humbled by the recognition of so many noble qualities surviving the trials and temptations of life.

Educated as you have been for your career, you commence your labors with an appreciation not only of the types of disease, but of their intimate associations and reciprocal influence on the habits and characters of men. The laws which will guide you in the future now stand clear and sharply defined in the light of their recent interpretation. How shadowy will they often seem when personal responsibility, physical exhaustion, harassing doubts wrap them as in a cloud; and perchance dishearten you as they have disheartened so many others. Ah! those first weary, anxious years of professional life, what touchstones they are for professional worth! They bear the germ of your destiny. Those plastic elements from which you must shape your own future lie there ready for your hand. Courage, patience, the love of doing good, and an honorable ambition, must cheer and spur you to a task, which will often seem fruitless, often unthankful, and never greatly remunerative. Nor will half measures suffice. Merely to keep the single talent there is as reprehensible as in the parable. Believe not that any profession is overcrowded. It were better that every profession were weeded; but talent, energy, and education will make their way now as they have in the past and will in the future. They will be welcomed now as ever, after they have sustained a careful scrutiny; they will be dreaded now as ever, for human nature is always the same. Do not believe in the cant which whines over an asserted lack of opportunity, and slanders another's success. A large practice, a great hospital, a professorship, are not necessary for the highest rewards of our profession. The simple, truthful cases of Smellie, observed in a limited country circle, will live on the record; Sydenham had not a little of the advantages which have done so little for so many. Opportunities sooner or later will come to all of you, but some may be heedless, others unprepared. The period of anticipation is never too long if passed in preparation; and many a brilliant career in our profession has dated from an occasion when merit disclosed itself without thought or hope of reward.

It is told of Dieffenbach, the great practical surgeon of his day in Prussia, that his masterly performance of the operation for strangulated hernia, alone, unassisted, in the night, by the dim light of an uncertain candle, on the most miserable of a miserable class, was the immediate cause of his advancement. A gentleman of rank and position, stopping to inquire his way, saw the young man triumphing over all his disadvantages, cool, skilful, self-reliant, and found him fitted for any position.

How many illustrations of these truths might this very audience afford! Would not their collective experience warn you rather against the dangers of too hasty professional success than of prolonged preparation?

You are entering on a new era in the medical history of our country. The prizes are sought by a greater number of educated men; and the truth is fully recognised that solid success needs the stamp of professional approbation. The different languages, and the various schools of Europe, are represented here; and hence, the interchange of opinion, and the comparison of results, must quicken endeavor, and predestine an alliance of erudition with American fertility of expedients full of promise for the future.

As you pass on to take your places in the arena, and are lost for a time amid the throng, believe that the heartfelt sympathy and confident hopes of this faculty accompany your steps; and that your alma mater awaits the glad tidings of your success as her greatest reward. You, the first born, must labor for her interests and encourage us to develop these advantages which will further the best interests of medical education. You and we advocate the principle to which this college owes its existence, and be-

lieve that the steady centralization of medical schools in cities, and the growing demand for bedside training, called imperatively for that intimate association of didactic with *true* clinical instruction offered in the Bellevue Hospital Medical College. Such results as have already attended the enterprise warrant our belief that it has helped to supply a professional want.

And now farewell! How dimly are the thoughts suggested by this parting mirrored by these imperfect sentences. But language is but the exponent of feeling, a dull register of that electric flash which leaps from heart to heart. The intimate associations of the winter have culminated this evening, and there is a bond between us for ever. May our college, our profession, our country unite in applauding some discovery, some trait of character which may make us all proud of our association with this class. And in addition to those rewards of professional life, of which alone it befits me to speak, may self-examination lead you to hope that both your thoughts and your actions may meet the approval of the Great Physician! Farewell!

Correspondence.

CHLOROFORM IN MIDWIFERY.

[To the Editor of the American Medical Times.]

Sir:—The discussion on Dr. Fordyce Barker's Memoir on the Use of Anæsthetics in Midwifery, as well as the memoir itself, have excited much interest in Europe; agreeing, as all the observations do, in a large degree, with what experience has taught us on the same subject, at this side of the Atlantic.

It is possible that the dangers of chloroform loom too largely through the heated atmosphere of modern discussion, and that the great prominence given, and possibly rightly given, to deaths from chloroform, in newspapers and journals, has had some effect in diminishing the usefulness of this most admirable agent. Dr. Detmold, like my late impulsive friend, Dr. Lever, of Guy's, thinks our mothers and grandmothers did very well without chloroform, and so ought the ladies of the present day; but the former did very well without vaccination, and telegraphs, and railways; would Dr. Detmold advise us to copy them also in those things, for the argument only amounts to that? Accidents from railways are quite as frequent—if not more frequent—than accidents from chloroform, whilst in midwifery there has not been a single well attested accident from anæsthetics.

The "cardiac syncope" of the schools, with engorgement of the right side of the heart—which is supposed in the public mind to be the frightful cause of all the accidents—is not cardiac syncope at all, no more than the great fact is a fact that we are going to have a great war with America about Mason and Slidell; as the latter fancy still pleases some persons, so the cardiac syncope dogma holds its ground in our leading London medical journals. The public have got the idea, and it answers best, what with artificial tympanums, chlorodyne, railway commissions, adulterations of mustard or water-cresses, or any half-dozen stolidities or quackeries of sanitary science in the book-publishing trade—not to run counter to the old ideas of heart-disease and chloroform. Cardiac syncope, as formerly described, is now found to be in fact a post-mortem change. It is not syncope, because the heart fails; it is engorgement, because the heart is the last to fail. But the book-publishing reviewers are instructed, that all the old books with heart-disease as their refrain must be first sold before the new ideas are spread abroad. In midwifery, one single death from chloroform, with a coroner's inquest, would enlist all the shut-up thunders of the *Lancet*, or in New Burlington street send up the sale of all old chloroform books fifty per cent.; in other words, what appears in London journals, or manuals, does not at all represent the feeling in hospitals, or in midwifery practice, in the experience of Europe generally on chloroform. If it is sternly held that chloroform kills like bullets in battle, that all the deaths are from diseased heart, and that there has been not a single accident from ether, it is easy to see how public prejudice must grow against chloroform; yet the remarks of Dr. Elliot, fully corroborated by the later ideas of my late friend Dr. Snow, in London, as to heart-disease, show very clearly what a bugbear heart-disease has been. The experience of Dr. Barker, Dr. Elliot, etc., as to spasmodic rigidity, use of forceps, puerperal convulsions, and version cases, quite agrees with that of the best men in England, such as Dr. Tyler Smith, Dr. Murphy, the late Dr. Rigby, etc., as well as with the views held by my friend Professor Simpson, of Edinburgh, and Dr. Churchill, of Dublin. As to chloroform in forceps cases, Dr. Gardner's remarks are excellent; forceps cases are like lithotomy cases, where Mr. Fergusson and other good surgeons now use chloroform; though a short time ago, and for the same reason as in forceps cases it was withheld; but this is all changed.

The only point of marked difference between the experience of America and of Europe in obstetrics is, as to the liability to *post-partum* hæmorrhage; here, in Europe, we scarcely agree with what Dr. Gardner has found; at the same time it may be explained in this way, that more recently we have discovered that ergot (and in large doses too) may be used with advantage, along with, or after chloroform, though half a dozen years ago they were looked on in some measure as incompatibles. This, indeed, may be one of the points where chloroform dangers have "loomed" too largely in discussions of some bookish men, and whilst every kind of known quackery, every patent drug of the chlorodyne or sugar-coated pills' kind, every kind of medicine-made-popular style of book is encouraged by London publishers. Chloroform is still fighting a direful battle with popular prejudice on one hand, and the cold water thrown on anæsthetics by such editors and publishers on the other. Yours, etc.,

Charles Kidd, M.D.

Sackville Street, London.
Feb. 20, 1862.

UNCONTROLLABLE VOMITING AFTER CHLOROFORM.

[To the Editor of the American Medical Times.]

Sir:—The following case brings out a feature in the use of anæsthetics that has not met with much attention:—

A short time ago I was called to a neighboring town in consultation to a case of arm presentation. Four physicians had been in attendance, and were exhausted with attempts to perform version; the patient being under the influence of chloroform. I found she had inhaled a good deal, the administration of the article having been kept up for several hours. I therefore objected to its further use until the operation of turning was carried far enough to cause pain. With considerable care and difficulty I succeeded in bringing down the feet, and after some time completed the delivery. The arm had been amputated at the elbow before my arrival, and as Churchill remarks, it was no advantage, as I fully proved during my work. The placenta was removed without any trouble. An anodyne cordial was administered, and I left the woman apparently strong and comfortable. I was informed by the medical attendant, the next time I met him, that the patient was attacked with vomiting which could not be restrained, brought on by, as he thought, the chloroform, and she ultimately died from exhaustion. He could not detect any other cause for her death. Does chloroform ever induce such unmanageable vomiting? What do Dr. Barker and others say on this point?

Yours, etc.,

J. H. Pooley, M.D.

Dobb's Ferry, Feb. 28, 1862.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 3d day of March to the 10th day of March, 1862.

Deaths.—Men, 114; women, 88; boys, 144; girls, 110—total, 456. Adults, 202; children, 254; males, 258; females, 198; colored, 10. Infants under two years of age, 173. Children reported of native parents, 22; foreign, 168.

Among the causes of death we notice:—Apoplexy, 8; Infantile convulsions, 33; croup, 14; diphtheria, 15; scarlet fever, 31; typhus and typhoid fevers, 11; cholera infantum, 0; cholera morbus, 0; consumption, 77; small-pox, 9; dropsy of head, 20; infantile marasmus, 20; diarrhœa and dysentery, 6; inflammation of brain, 15; of bowels, 5; of lungs, 29; bronchitis, 7; congestion of brain, 12; of lungs, 6; erysipelas, 4; whooping cough, 7; measles, 3. 253 deaths occurred from acute disease, and 88 from violent causes. 321 were native, and 131 foreign; of whom 75 came from Ireland; 2 died in the Immigrant Institution, and 65 in the City Charities; of whom 20 were in the Bellevue Hospital.

Deaths for the Week ending March 11, 1861	.....	398
" " " " March 2, 1862	.....	424
" " " " March 9, 1862	.....	456

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Mar. 1862	Barometer.		Temperature.			Difference of dry and wet bulb. Thrm.		Wind.	Mean amount of cloud.	Humidity Saturn. 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In	•	•	•	•	•			
1st.	29.64	.10	27	18	35	5	8	N.W.	0	667
2d.	29.90	.10	28	22	35	4	6	N.W.	2	717
3d.	29.71	.50	31	26	35	1	3	N.E.	10	934
4th.	29.47	.40	33	31	35	4	6	W.	6	730
5th.	29.70	.30	35	30	40	3	5	N.E.	10	784
6th.	29.64	.10	32	25	40	4	6	W.	3	724
7th.	29 69	.11	32	22	41	5	8	W.	0	676

REMARKS.—1st, Clear, fresh wind all day. 2d, Clear A.M., variable P.M. 3d, Hard rain, hail, and lightning evening. Amount of rain on 3d and 4th, 0.91 in. 4th, Very hard rain early A.M Barometer 29.20 in., wind fresh most of the day, cloudy late P.M. 5th, Variable A.M., with light fog, light snow storm commenced with change of wind at 2 P.M., lasting with light rain until midnight. 6th, Variable, clear late P.M. 7th, Wind fresh A.M., clear all day.

MEDICAL DIARY OF THE WEEK.

Monday, March 17.	NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M. EYE INFIRMARY, 12 M.
Tuesday, March 18.	NEW YORK HOSPITAL, Dr. Markoe, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.
Wednesday, March 19.	NEW YORK HOSPITAL, Dr. Cock, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Sayre, Is. Hos., half-past 1 P.M. EYE INFIRMARY, 12 M. ACADEMY OF MEDICINE, 8 P.M.
Thursday, March 20.	NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Elliot, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.
Friday, March 21.	NEW YORK HOSPITAL, Dr. Markoe, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Flint, half-past 1 P.M. EYE INFIRMARY, 12 M. Dr. Noyes's Lecture, half-past 1 P.M.
Saturday, March 22.	NEW YORK HOSPITAL, Dr. Cock, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Wood's Clinic, 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICES.

NEW YORK ACADEMY OF MEDICINE.—*At the meeting on Wednesday Evening, March 19th, the members will be called upon to give a definite expression, by discussion and vote, on the propositions submitted by* DR. BARKER, *at the end of his paper, "On the Use of Anæsthetics in Midwifery." See* AMERICAN MEDICAL TIMES, *March 8, p. 142.*

P. W. BEDFORD,

PHARMACEUTIST,

REMOVED TO

745 *Sixth Avenue, near Forty-fourth Street,*

Opposite Sixth Avenue Railroad Depot.

The Examination for Junior Assistants to Bellevue Hospital will take place on March 18, 1862. Application must be made at once to the Chairman, JAMES R. WOOD, 2 Irving Place. The applicant must come recommended to the Committee by a member of the Medical Board of Bellevue Hospital.

JAMES R. WOOD, CHAIRMAN.

In the Press. To be Ready about the 15th April.

ON

MILITARY AND CAMP HOSPITALS,

AND THE

HEALTH OF TROOPS IN THE FIELD.

Being the results of a Commission to inspect the Sanitary Arrangement of the French Army, and incidentally of other Armies in the Crimean War.

BY

L. BAUDENS,

INSPECTOR AND MEMBER OF THE COUNCIL OF HEALTH OF THE ARMIES; FORMERLY SURGEON-IN-CHIEF AND FIRST PROFESSOR OF THE PERFECTING SCHOOL OF VAL-DE-GRACE, ETC., ETC., ETC.

TRANSLATED AND ANNOTATED BY

FRANKLIN B. HOUGH, M.D.

BAILLIERE BROTHERS, PUBLISHERS,
440 Broadway, New York.

Sent Free by Mail on Receipt of Price.

Records of Daily Practice: a Scientific Visiting List for Physicians and Surgeons.

CONTENTS:

Present State of Patients	72 donble pages.
Microscopical Examinations	4 pages.
Obstetrical Engagements	4 "
Vaccination	4 "
Consultation and other Professional Engagements	4 "
List of Nurses and Address	2 "
Meteorological Observations and Endemic Influences	4 "
Miscellaneous Memoranda	6 "
Index of Patients	4 "

This little book is not intended to supersede the use of a regular visiting list; its aim, as the title indicates, is to supply a medium for taking notes of the state of the patient, as soon after the visit as it is possible, and whilst the facts are still fresh in the memory. In hospital practice we believe it will be found invaluable. The arrangement, under the head of "*Present state of the Patient*," is admitted, by competent judges, to be all that could be desired.

Price, in cloth, 50 cents, or in pocket-book form, 75 cents, by mail, free on receipt of the price.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Illustrated manual of Operative Surgery and Surgical Anatomy. Edited, with Notes and Additions, by W. H. VAN BUREN, M.D., Professor of Anatomy, University Medical College, and C. E. ISAACS, M.D. Complete in one volume, 8vo, with 113 colored plates, half-bound morocco, gilt tops. Price, $15 00. The same with plain plates, $9 50.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

A Manual of Etherization:

Containing Directions for the employment of Ether, Chloroform, and other Anæsthetic Agents by Inhalation in Surgical Operations, intended for Military and Naval Surgeons, and all who may be exposed to surgical operations; with Instructions for the Preparation of Ether and Chloroform, and for testing them for impurities; comprising also a brief history of the Discovery of Anæsthesia. By CHAS. T. JACKSON, M.D., F.G.S.F. 12mo. Boston, 1861. 75 cents.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Essays and Observations on Natural History, Anatomy, Physiology, Psychology, and Geology, by John Hunter, F.R.S.; being his Posthumous Papers on those subjects, arranged and revised, with notes: to which are added the Introductory Lectures on the Hunterian Collection of Fossil Remains, delivered in the Theatre of the Royal College of Surgeons. By Richard Owen, F.R.S., D.C.L. 2 vols. 8vo. London, 1861. Price, $10.00.

BAILLIERE BROTHERS, 440 Broadway.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians (principally country Physicians) Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEUEALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGEES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bourbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The anfricidly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA,

FOR NERVOUS AFFECTIONS.

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Grannle contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Grannles daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyosciamus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villenonve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

CLINICAL LECTURES ON THE PUERPERAL DISEASES.

DELIVERED AT THE

BELLEVUE HOSPITAL MEDICAL COLLEGE.

By B. FORDYCE BARKER, M.D.,

PROFESSOR OF MIDWIFERY AND DISEASES OF WOMEN, ETC., ETC.

LECTURE III.—PART II.

ON INFLAMMATION OF THE BREASTS AND MAMMARY ABSCESS.

Prognosis.—This must include the questions not only as to the duration of the disease, that is, the time required for its cure, but the effect upon the general health, the probable recovery, the possibility of continuing lactation in the affected breast, and the subsequent capacity of the organ for its functional duties. First, as to duration, this will depend in a great measure upon the seat and type of the inflammation, and the character of the abscess as well as the condition of the general system. The inflammation of the subcutaneous areolar tissue may terminate either by resolution or by suppuration, and either result is attained much more rapidly than it is where the glandular structure is involved. Unless appropriately treated at an early stage, it almost always ends in suppuration, which usually takes place within a week or ten days. Even when resolution is secured, there is apt to remain some induration of the tissue involved, and a slight cause will be sufficient to re-awaken the inflammation. The subcutaneous abscess is usually cured within a week or ten days after it is opened. It is very rare that this form of abscess lasts two or three weeks.

The existence of inflammation of the *sub-glandular* areolar tissue can be very seldom positively determined until after suppuration has taken place, and even if it be suspected, very little can be done by treatment to prevent such a termination. For this and other obvious anatomical reasons, the duration of the sub-glandular abscess is much longer than the subcutaneous. Inflammation here exhibits a marked tendency to become diffuse, while in the former case it is ordinarily circumscribed. Even if it be circumscribed, and the pus be formed near the centre of the gland, it is very difficult to ascertain its existence, and thus secure an early discharge by an artificial opening with the knife. If left to come to the surface spontaneously, the pus not unfrequently finds an exit through several channels, and results in those intractable fistulas which I have before alluded to. Again, inflammation of the parenchymatous structure of the organ is very liable to be developed as a secondary affection. So if you look over the published reports of cases of this kind, you will see that they are apt to last two or three months, and sometimes longer.

The duration of the *glandular* inflammation is usually much longer than that of the superficial or profound areolar tissue of the breast. Its march is much less rapid, suppuration takes place much more slowly, and there remains an induration which requires a long time to disappear. It may attack one or more lobules at first, and while these are passing through the process of suppuration, contiguous lobules become inflamed, and thus we may have a succession of abscesses lasting for months. A prudent physician will be very guarded in his prognosis as to the duration of this kind of mammitis, as it is very variable and must depend upon the number of lobules successively involved. To use Velpeau's illustration, suppose that the second abscess does not open until a week from the first, the third a week from the second, and so on, it is evident that when fifteen, twenty, or thirty abscesses are developed, as has frequently happened, the poor woman must be a suffering victim for months. One of Velpeau's cases lasted for eight months, another six, several three. Indeed, Velpeau says that from two to three months is the usual duration of this form of mammitis. The cases reported by other authors confirm this opinion. So, gentlemen, if you conscientiously study your cases, and are fully informed as to all that is known in regard to the laws of the disease, its progress, result, and treatment, and have exercised a sound judgment in the application of your knowledge; you need feel no self-reproach for results which are common to those of the largest clinical experience and the acknowledged first practical talent. The next question that arises is, as to the influence of mammitis on lactation. The answer will depend upon the tissue involved, and the extent and termination of the inflammation. Circumscribed inflammation of the areolar tissue, whether superficial or deep-seated, when the glandular structure is not implicated, even if it terminate in abscess, may not arrest lactation. It may be temporarily interrupted, and afterwards completely restored. When the inflammation is diffuse, and the pus is discharged by several openings, the secretion of milk is usually arrested. This may be partly due to the extent of the inflammation, and may be partly owing to the necessary treatment of the case. But in these cases, the subsequent functional capacity of the organ is not impaired, unless more or less sloughing of tissue has occurred, and, as a consequence, such cicatricial adhesions as must necessarily involve the lacteal ducts, and the glandular structure of the organ. I have found the impression general with monthly nurses and with patients, that if a breast be broken, as they call it, it will ever after remain useless as an organ of lactation. But you see that is not necessarily the case. It is the exceptional result, in the subcutaneous and the subglandular abscesses, and is by no means a universal result of the glandular abscesses. In the latter it depends upon the amount of glandular structure involved. I have seen lactation restored and nursing resumed in many cases after the cure of glandular abscess. But where there is a succession of this form of abscesses, so much structural lesion is produced as permanently to destroy the functional capacity of the organ. Hence, I have seen quite a number of women in whom one breast has been compelled to do the duty of both.

As regards the general health of the patient, mammary abscess is always a serious and deplorable complication. Most patients recover their health eventually, but Velpeau, Burns, and others, have reported cases where the result was fatal. I have never known a case to terminate in death, but I have seen more than one where I have been very apprehensive as to the result. You can all understand what sad havoc may be made on the constitution, by numerous suppurating sinuses and large cavities. The patient has repeated chills, followed by fever and exhausting perspirations. There is generally entire loss of appetite, amounting to a loathing of food, frequent nausea, and vomiting of bile, and often diarrhœa. The pulse is frequent and gradually becomes more feeble. She emaciates rapidly, the nervous system becomes excessively irritable, the spirits despondent, the mind weakened, and sometimes the brain is seriously disturbed. I know of no affections which produce such mental despondency, unless it be some connected with the organs of generation. Dr. Thomas says, sometimes the patient becomes furiously delirious, and the symptoms would lead to a diagnosis of puerperal mania, when this slight collection of pus is the cause of the mental aberration. I have never seen such a case, but I can readily accept the proposition; and Ramsbotham relates a case which confirms the statement. Now, if we thoroughly appreciate the gravity of the disease that comes under our care, we shall feel the necessity of perfectly understanding its appropriate treatment.

Treatment.—I shall aim to give you minute special directions not only in regard to the management of each form of mammitis, but also for each special condition which may arise, because it seems to me that most young practitioners will find the directions given by authors in many particulars vague, indefinite, and unsatisfactory, and because there is

still a difference of views in some points of practice. First, then, in regard to the subcutaneous form, it is to be treated exactly as you would treat phlegmonous inflammation in other parts. You must, however, remember that inflammation is usually (not always) of an asthenic character, and consequently antiphlogistic means of an active character are not admissible. I trust all of you have read or will read Paget's lectures on inflammation, and if so, you will see how improper oftentimes antiphlogistics are in suppurative inflammation. Well then, if there is strong febrile reaction and a high degree of vascular excitement, you will give a diaphoretic sedative, such as aconite, tartar emetic, etc.* To allay pain and procure sleep, at night give eight or ten grains of Tully's powder, or of Dover's powder. Sometimes you will find it well to add to the powder a couple of grains of calomel, and to give the next morning a seidlitz powder or a bottle of the sol. of citrate of magnesia. When there is an epidemic or endemic† tendency to this form of suppurative inflammation, you will avoid such agents as the aconite and the tartar emetic, but instead give your patients quinine, in as full doses as the system will tolerate it. By the use of this article you will often prevent suppuration, as I have frequently demonstrated both in the hospital and in private practice. As for the local treatment, an abscess may frequently be aborted, if you see the case sufficiently early, by freely painting over the inflamed surface with iodine, just as you may abort a boil or carbuncle. But in order that this treatment should prove successful, I think it is necessary that it should be applied within twenty-four hours of the commencement of the inflammatory process. As in other phlegmonous inflammations, warmth and moisture are of the greatest service, in relaxing the tension, favoring the effusion, and thus relieving the over distended vessels. You apply this by means of either a bread and milk or linseed meal poultice, as hot as it can be borne, or, which I generally prefer, by water dressings, that is two folds of lint soaked in warm water and covered over with oiled silk, which should extend all around much beyond the lint. In this form of mammitis, as also in the subglandular form, rubbing the breasts, which with some seems to be a routine practice, is absolutely pernicious. A moment's reflection will convince you that it must be so, and yet I have been often surprised to see how carelessly it is prescribed. So also in these cases the application of belladonna is entirely useless, except as it relieves pain. As soon as the abscess points and the fluctuation can be detected, it should be opened in the most dependent point, but carefully avoiding the areola, as, if it be opened here, the cicatrix may produce retraction of the nipple, and thus prevent the use of the breast after subsequent labors. Formerly, the profession were much divided as to the question whether mammary abscess should be opened, or whether it should be left to burst spontaneously, but there is no longer a doubt on this point. However, if my patients have a great horror of the lancet, while I tell them that they will probably be saved two or three days' suffering, and the cure will be effected two or three days sooner by opening the abscess, I do not *insist* upon it, in the subcutaneous variety, as I do in the glandular and subglandular, for in the latter serious consequences may result from a neglect to do so. The poultices should be continued until the abscess is emptied. But be careful not to apply them too long. The breast should always be well supported. If the induration remain after the abscess is healed, compression either by adhesive plaster or by the compressed sponge should then be applied. I shall discuss this point fully in connexion with the other forms of abscess.

In the treatment of the *subglandular* form of mammitis, the same general principles should govern us, as to constitutional measures, as in the subcutaneous variety. Either sedatives, anodynes, laxatives, or tonics, like quinine, may be indicated, and the indications are too plain to be mistaken by any but the merest routinist. But little can be anticipated from any topical treatment. Rubbing the breasts, for reasons already given, will be worse than useless. The application of the extract of belladonna will do little to mitigate the pain, and nothing to prevent the formation of pus, while its disagreeable offensive odor is a strong objection against its use, unless we are certain to do good by it. Furthermore, if, as is now generally supposed, it has a direct influence in arresting the lacteal secretion, it may do positive harm, because otherwise this function may be preserved. So too compression, by any means, is not to be thought of, and for this reason. The purulent accumulation is between the breast and the chest, and it seeks an exit at the surface. The most favorable point for this, is at the inferior circumference of the gland. But if compression is used, it may result in the formation of several sinuses at the circumference, or the ulcerative process may be developed in the areolar tissue between the lobules of the gland, and subcutaneous abscess appear as secondary to the subglandular. Indeed, several subcutaneous abscesses may result from one purulent cavity between the gland and the chest. While these are occasionally spontaneous results, it is certain that compression, especially if it be effected by the compressed sponge, as recommended by Dr. Foster, must favor such results, as in the latter case we have compression and a poultice combined. Poultices in this form of mammitis can have no influence in promoting resolution or advancing suppuration. Their sole effect must be to soften the tegumentary covering, and they may, for this reason, cause the pus to come to the surface at one or more unfavorable points. So I never use them in these cases. The sole remedial measure of value, is the early discharge of the pus by incision. If the conditions of the case will admit of an election, the opening should be made at some inferior point of the circumference of the breast, so as to prevent secondary inflammation of the glandular structure, or of the subcutaneous areolar structure. Sometimes, where the signs of subglandular abscess existed, but no fluctuation could be detected, I have cleared up all doubts, by lifting up the gland from the thorax, and passing between them an exploring needle. If pus was found in the canula, I have then made a sufficiently large incision with a long tenotomy knife, and these cases have been rapidly cured.

But if the abscess points on the anterior surface, then the opening must be made where the fluctuation exists, and care must be taken to prevent its closure before the pus is all discharged by the insertion of a tent. After a few days compression should be used, leaving the sinus open, for the purpose of completely evacuating the purulent cavity and promoting adhesion of its walls.

Glandular inflammation, or *mammary adenitis*, if you prefer to use the less simple term, presents two types. In the one, the different stages of the inflammatory process succeed each other with great rapidity. If resolution is not obtained, suppuration and cicatrization require but comparatively a short time. Thus among the cases of Velpeau you will find one, in which several lobules were involved, terminating in abscess, but completely cured in nineteen days. Another case of multiple lobular abscess was entirely well in a month. All practitioners of any experience have met with such, and these are undoubtedly the cases, which have led some writers for medical journals to believe, that some special treatment peculiar to themselves is a great advance upon everything before known. But in the other type, the different phenomena of inflammation are slowly developed, and the corresponding symptoms are much less intense, and so you see cases reported by Dr. Foster, Dr. Johnson, Velpeau, and many others, running on for two, three, or four months, and sometimes for six or eight months. The first class generally occurs in those of vigorous constitution, active circulation, cheerful temperament, and happy nervous organiza-

* See prescription, page 90, of present volume of Medical Times.

† In visiting the convalescent wards of the puerperal patients in Bellevue Hospital, on Monday, March 10, 1862, I found five women with subcutaneous mammary abscess. These were all, undoubtedly, due to an endemic cause, viz. the impure air of the ward.

tion. The second is most frequently met with in those of a lymphatic temperament, an irritable nervous system, low vital powers, and a despondent morale. In the first class, then, you will readily see that vascular sedatives, saline laxatives, anodynes, and an antiphlogistic regimen will be required, while in the other, as nutritious a diet as the stomach will take care of, stimulants, such as ale, wine, or brandy, tonics such as quinine and iron, and opiates, will be indicated. I take it that it is unnecessary for me to say more than this in regard to the constitutional treatment. The local demands a much more extended discussion. First then, primitive glandular inflammation is almost invariably preceded or accompanied by obstruction of the lacteal ducts, or lacteal engorgement as it is termed. Inflammation seems for a time to increase the functional activity of the organ in some cases, while on the other hand, lactation also aggravates the inflammation and increases the tendency to the formation of pus. Nursing, therefore, should be forbidden, as the pain and excitement produced by the infant at the breast, must act unfavorably upon the inflammatory process, but if the lacteal secretion appears to continue with activity, the breast must be disgorged by artificial means. This can be best effected by rubbing the breast, gently but perseveringly, from circumference to the nipple, the hand being lubricated with sweet-oil. The rubbing should be continued until the breast is soft, and all nodulated indurations have disappeared, and for one or two days this process should be repeated every two hours. This is a method which has long been adopted in the Dublin Lying-in Hospital, and is warmly recommended by both Dr. Foster and Dr. Thomas; and from a large experience, I am able to fully endorse all that they have said in regard to its value. Then, the next question is, what is the best means of preventing the return of the lacteal engorgement. Camphor is generally believed to exert a specific influence in diminishing the lacteal secretion, and so some have recommended that the camphor liniment, or the camphorated oil, as it is popularly called, and another has recommended that a saturated solution of camphor in glycerine, should be used in rubbing instead of the olive oil.

But I prefer the olive oil for rubbing the breast, and then to cover it with the extract of belladonna, either pure or softened with a little glycerine. Sometimes I direct that the breast should be kept covered with a cloth on which the extract of belladonna has been spread, leaving a hole for the nipple. Belladonna not only relieves the pain resulting from the tension of the tissues, but from its power of relaxing muscular fibre, it seems to allow a more free exit of the milk, by dilating the lactiferous tubes; and within a few years past, it has been believed to possess the property of arresting the lacteal secretion. Those who heard me lecture on this subject in this hospital two years ago, it is very probable heard me express my unqualified belief, that it does not possess this power; but I do not wish to be considered as bound by the opinions expressed two years since, and I may in another period of two years have different views from what you have heard this winter. A more enlarged experience, and a more careful study of the subject, have often led me to change my medical opinions. I now am not so clear whether the arrest of the lacteal secretion is due to the belladonna or to the associated conditions which exist when the belladonna is used. But of this I am certain that it is a most valuable application to the breast, in glandular mammitis, and I have used it for this purpose (and have also applied it to the leg in phlegmasia dolens), for more than twenty years. I received the hint from Dewees, who professes to have got it from Ranque, whoever he may be. But to pass on; if these means do not secure resolution, it only remains to open the abscess when suppuration has taken place. The opening should be large enough to allow all of the pus to freely and easily escape. The next remedial measure, having for its object to relieve engorgement of other lobules, to remove induration, to prevent purulent infiltration into the adjacent areolar tissue, and the formation of obstinate fistulous sinuses, is *compression*. This should be applied so as to support the breast and firmly compress it from the centre to the circumference, without closing the aperture for the escape of pus; and is usually best effected by means of adhesive plaster. There are several modes of applying adhesive plasters, described by different authors, either of which may be preferable to all others in certain cases. I will not stop to describe each of these methods, as none of them are adapted to all cases, and some of them are open to this objection, that they seriously interfere with respiration. It is impossible to lay down a definite rule for the application of the adhesive strips, because the breast differs so much in different women, in size, shape, form, and position of attachment on the chest. I shall only give you this general rule—apply the straps so as not to impede respiration, but so as to support the breast, and firmly and equally compress all its parts from the circumference to the nipple, leaving the latter free, and also an opening for the escape of the pus where the discharge has taken place. Your success in securing these results will depend upon individual tact, and if you have not that, no rules will supply its place. With regard to compressed sponge, as a means of compression, I will only say that I have seen it of great service where both compression, and warmth, and moisture are required, that is in promoting resolution of glandular inflammation.

But it strikes me as liable to two objections in open abscess. First, the sponge absorbs and retains the discharged pus, which in a short time becomes decomposed, and is extremely offensive; and second, the rollers applied around the body, to secure the compression, must interfere somewhat with the respiration, and if the compression is to be kept up any length of time, this becomes a serious objection. I have said nothing about the use of stimulating injections, such as the tinc. of iodine, the solution of sulphate of zinc, or sulphate of copper, to cure up obstinate fistulous sinuses, because I have no experience in their use, having never met with a case where they were not readily cured by compression.

Mammary Neuralgia.—I shall say a few words on this affection, as a cause of preventing lactation, since I do not remember to have seen any allusion to it by any author, I have, however, met with a few cases, where nursing produced such intense agony as to compel the poor sufferer to abandon it, although not the slightest disease of either the nipple or the breast could be discovered by the most careful examination. In the cases which I have seen, this symptom has not been developed until two or three weeks after nursing has been commenced. There was not the slightest pain or tenderness, except when the child was at the breast, neither could the pain be produced by any manipulation of the organ. In one patient, the nursing of one breast produced intense neuralgia in both. The first few cases that I saw I could do nothing for either by local or constitutional treatment, and the patients were compelled to give up nursing. But those which I have seen within a few years past, have been cured by quinine. I have given four grains three times a day, gradually decreasing the quantity as its specific effects were developed.

The hospitals of Vienna are at this present time crowded with patients. On Jan. 28th, there were in the General Hospital 2383 patients; rheumatism and fevers, smallpox and measles, being the prominent diseases. Our French friends, who are talking just now so much against the "agglomeration" of the sick, might get some facts from the bills of mortality of this General Hospital of Vienna.

MM. Robert and Colin have presented to the Academy of Medicine an instrument, by which anatomical microscopists are enabled readily to obtain sections of animal or vegetable tissues of the one-hundredth of a *millimètre* in thickness.

Original Communications.

THE CLIMATE OF THE STATE OF MINNESOTA,

AND ITS ADAPTATION TO PERSONS SUFFERING FROM PHTHISIS PULMONALIS.

By GEORGE LEWIS, M.D.,
OF ST. PAUL, MINNESOTA,
MEMBER OF THE NEW YORK ACADEMY OF MEDICINE, OF THE NEW YORK PATHOLOGICAL SOCIETY, ETC., ETC.

Continued from page 149.

A CURSORY glance at the statistics of mean precipitation and temperature, which we have collated and arranged, shows a combination of coincidences most favorable to vegetable growth. The uniform and ample precipitation of the wet season, commencing with the spring and continuing through the summer months, the early and rapid advance of the spring temperature for a large area of country, central at Fort Snelling, having an average of twenty-eight degrees, corresponding to that of twenty degrees at eastern stations, together with a warm and productive soil, furnish a ready explanation for the rapid and luxuriant growth of vegetation, and the early maturity of Indian corn, and all the cereals which are so successfully cultivated in the climate and soil of Minnesota.

	Spring.	Days.	Summer.	Days.	Autumn.	Days.	Winter.	Days.
Fort Snelling, Minnesota	March 21—June 8	80	June 9—Sept. 15	99	Sept. 16—Oct. 23	38	Oct. 24—March 20	148
Burlington, Vt.	March 30—June 4	67	June 5—Sept. 20	108	Sept. 21—Oct. 23	33	Oct. 24—March 29	157
Boston, Mass.	March 30—June 1	74	June 2—Sept. 20	111	Sept. 21—Nov. 5	46	Nov. 6—March 19	134
Toronto, Canada	April 1—June 10	71	June 11—Sept. 13	95	Sept. 14—Oct. 22	39	Oct. 23—March 31	160
New York City	March 15—June 1	79	June 2—Sept. 20	111	Sept. 21—Nov. 15	56	Nov. 16—March 14	119
Rochester, N. Y.	March 20—June 4	77	June 5—Sept. 15	103	Sept. 16—Nov. 1	47	Nov. 2—March 19	138
Philadelphia	March 15—May 18	65	May 19—October 1	136	Oct. 2—Nov. 20	50	Nov. 21—March 14	114

The division of the seasons of different sections of the country into natural constants, or, in other words, with reference to the germination, development, and maturity of vegetation, has been made, showing the commencement and duration of the "leafing, flowering, fruiting, and dormant seasons." The foregoing table indicates the date of commencement and end of each season, with the number of days, duration of each, in the vicinity of the localities mentioned.

This table, while it shows that at this point there is ample time during the warm seasons for the growth and maturity of vegetation, at the same time corrects the misconception so universally prevalent of the enormous disparity in the length of the winter season here, as compared with other localities.

UNIFORMITY OF TEMPERATURE.

Notwithstanding the fluctuations of winter temperature are in the main less frequent and sudden in this interior climate than on the sea-board, yet the current reports of its unvarying uniformity at from ten to fifteen below zero, the mercury obstinately refusing to rise higher, are great exaggerations, as reference to our meteorological tables abundantly proves. Although uniformity is not characteristic of either climate, the range of temperature for both is limited to very different points on the thermometrical scale. While in the one (I refer now to New York and its vicinity) the mercury vibrates fitfully from point to point above, or from some point above to one below freezing, here its vibrations are from one freezing point to another; its more usual range being from fifteen below to fifteen above zero. It does not frequently, during the winter months, rise so high as the point of congelation; thus winter, having once resumed its sway, seldom relaxes its grasp until its icy fetters break before the genial warmth of returning spring.

That reports of the remarkable uniformity of the winter temperature of this climate have gained currency, is unquestionably attributable to the fact that, when its variations do not exceed the point above named, the inconvenience felt is so wonderfully slight, that the system scarcely takes cognizance of the change.

The following Meteorological Report, by the Rev. Dr. Patterson of St. Paul (to whose kindness I am indebted for much valuable information respecting this country and climate), conveys an accurate idea of its range of winter temperature:—

December, 1860.

Observations of the thermometer furnish the following results:—

		Degrees.
Maximum of month	(6th—8th)	37
Minimum "	(30th)	—19
Highest daily mean	(8th)	32½
Lowest " "	(30th)	—9
Greatest " range	(11th)	27
Least " "	(9th)	4
Range of the month		56
Mean " "		14 892.

January, 1861.

The thermometer, observed at 7 A.M., and 2 and 9 P.M., gave the following result:—

		Degrees.
Maximum of month	(14th)	36
Minimum "	(24th)	—15
Highest daily mean	(14th)	31½
Lowest " "	(30th)	—9
Greatest " range	(22d)	28
Least " "	(11th)	2
Range of the month		51
Mean " "		9 645

Snow was observed to fall on 18 days, to the amount of 11 inches. The reduction to water gave ·55 of an inch.

In January, 1860, the amount of snow was two inches; water from melting, ·10 of an inch.

February, 1861.

Observations of the thermometer at 7 A.M., and 2 and 9 P.M., gave the following results:

	Degrees.
Maximum of month (26th, 27th, 28th)	41
Minimum " (7th)	—27
Highest daily mean (28th)	37⅓
Lowest " " (7th)	—19⅔
Greatest " range (3d)	85
Least " " (15th)	5
Range of the month	68
Mean temperature of the month	17·928
" " February, 1860	17·894
" " February, 1859	17·223

This comparison shows a remarkable uniformity of temperature.

The following table shows the maximum, minimum, and range of temperature during the winter months for two successive seasons, at Fort Snelling, New York, and Boston:—

Months.	1855–6. Fort Snelling.			1855–6. Fort Columbus, N. Y.			1855–6. Ft. Independence, Boston.		
	Max.	Min.	Range	Max.	Min.	Range	Max.	Min.	Range
	°	°	°	°	°	°	°	°	°
December.	44	—30	77	52	14	38	52	7	45
January...	32	—54	64	36	—6	42	36	—5	41
February..	42	—31	73	40	4	36	41	1	42
	1856–7.			1856–7.			1857–8.		
	°	°	°	°	°	°	°	°	°
December.	35	—15	50	47	4	43	54	18	41
January...	28	—35	63	36	—5	41	54	9	45
February..	42	—35	77	60	6	54	45	6	59

While these statistics show greater extremes of winter temperature at St. Paul than at the places above named, they demonstrate the facts which we have previously stated, that at those places its range is from some point above to one below freezing, while here, it is from one freezing point to another. From the statistics now cited the inference must not be drawn, that the extremes of temperature are greater here than for corresponding latitudes east; for such is not the case.

The following table shows the yearly extremes of temperature for three successive years at Fort Snelling, New York, and Boston:—

Years.	Fort Snelling.			New York.			Boston.		
	Max.	Min.	Range	Max.	Min.	Range	Max.	Min.	Range
	°	°	°	°	°	°	°	°	°
1855.....	96	—33	129	92	—6	98	98	—5	103
1856.....	95	—32	127	95	—6	101	98	—5	103
1857.....	91	—35	126	91	15	76	91	—13	104

The following table, showing the mean force of the winds at various places during the months of January, February, March, and December, in each year, for a series of years, is transferred from Neill's History of Minnesota.*

The showing of this table gives a smaller mean force at Fort Snelling than at any other point named, which may be owing to the fact that, during the cold winter weather, the atmosphere is very still. The prevailing winds at this point are westerly.

* In this classification 0 signifies a calm; 1 a barely perceptible breeze; 2 a gentle breeze; 3 a moderate breeze; 4 a brisk breeze; and so on to 10, which represents a violent hurricane.

Places.	1845	1846	1847	1848	1849	1850	1851	1852	1853	1854
Fort Snelling, near St. Paul,	1·59	1·72	1·63	1·74	1·55	2·05	2·18	2·00	1·80	2·41
Fort Trumbull, New London, Conn.	2·58	2·85	3·18	3·08	3·41	2·93	2·31	2·45	2·16	1·66
Fort Hamilton, N. Y. Harbor	3·28	3·49			3·40	3·14	3·40	3·14	1·90	
Fort Niagara, New York	3·38	3·28			3·50	3·24	2·40	3·54	2·20	2·57
Fort Columbus, N. Y. Barracks, Flatsburg, N. Y.	2·85	1·69								
Fort Sullivan, Eastport, Maine.	3·29									
Fort Constitution, Portsmouth, N. H.	2·44									
Allentown, Penn'a. Pittsburgh, Pa. Arsenal, Detroit Barracks, Detroit, Mich.	2·18	1·85	2·08	1·86	2·08	2·18	2·38	2·70	2·55	2·74
Fort Atkinson, Winneshiek Co. Iowa.	2·46	2·46								
Fort Leavenworth, Kansas.	2·19	2·19								
Average force at all places.	2·63	2·40	2·15	2·17	2·57	2·92	2·80	2·59	2·22	2·80
	2·89	2·97	1·70	1·99	2·55	1·45	1·61	2·08	2·07	2·80
	2·88	2·97	1·70	1·99	2·55	1·45	1·61	2·08	2·07	2·80
	.....	.....	.....	.....	1·72	2·11	2·82	.....	.....	.....
	.....	.....	.....	.....	.....	2·29	2·15	2·74	2·01	2·55
	.....	.....	.....	.....	.....	2·18	2·38	2·70	2·65	2·55
	.....	.....	.....	.....	.....	2·81	2·87	2·55	2·63	.....
	3·29	.....	.....	.....	1·48	1·54	2·19	.....	.....	.....
	2·44	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1·85	2·08	1·86	2·08	.....	.....	.....	.....	.....	.....
	2·46	.....	.....	.....	.....	.....	.....	.....	.....	.....
	2·19	.....	.....	.....	.....	.....	.....	.....	.....	.....
Whole number of years.	10	10	5	5	10	10	10	10	5	5
Mean Force whole term.	2·42	2·40	2·26	2·20	2·20	2·20	2·50	2·63	2·63	1·90

The following table designates the number of fair, cloudy, and stormy days for successive years at Fort Snelling, as compared with other stations:

Places.	Fair.	Cloudy.	Rain.	Snow.
Fort Snelling,..... 1856	223	143	46	26
" " 1857	231	134	33	26
Fort Columbus, N. Y.....1856	117	189	78	17
" " 1857	191	174	69	16
Fort Independence, Boston*.....1856	201	147	92	15
" " " " 1858	216	149	88	21
West Point, N. Y.....1856	209	157	83	27
" " 1857	206	159	87	25
Fort McHenry, Baltimore.....1856	224	142	78	15
" " 1857	191	174	76	14
Carlisle Barracks, near Phila.....1856	241	125	69	30
" " " " 1857	214	151	70	23

If the brief period over which these statistics extend, can be considered a criterion by which to judge of fair weather, Minnesota does not suffer in comparison with other places. The early autumn here, like that of New England, is surpassingly fine and beautiful. The late autumn is frequently stormy and unpleasant. The transition from autumn to winter, which occurs the latter half of November, is wonderfully short and rapid.

The prevailing sentiment in the minds of those unaccustomed to dry seasons, which intuitively associates large bodies of snow with a northern latitude, the statistics of winter precipitation for this country most emphatically contradict, giving an annual mean of only 1·92 inches. Occasionally, during the month of November or March, a fall of snow resembling in dampness and weight an eastern snow

* Seventeen last days of January unobserved.

storm, visits this country, but such are not of frequent occurrence. Its winter storms are usually such as would not at the east be dignified by the name of snow storms, but are very fine, light, and dry, the snow being frequently insufficient in quantity to make good sleighing, and when melted, requires nearly double the number of inches usually reckoned, to make an inch of water.*

We cannot better close this article on climatology, than by citing the testimony of Lieut. Maury and Mr. Blodget, whose united investigations compass both land and sea:—"The assertion may, at first, appear unwarranted, but it is demonstrable that an area, not inferior in size to the whole United States east of the Mississippi, now almost wholly unoccupied, lies west of the 98th meridian and above the 43d parallel, which is perfectly adapted to the fullest occupation by cultivated nations. The west and north of Europe are there reproduced, with the exceptions caused by vertical configuration only; and, important as this feature of configuration is in giving us a lofty mountain boundary on the west, we may charge much of disadvantage to that account, and still have all that is here claimed—an immense and unmeasured capacity for occupation and expansion. By reference to the illustration of the distribution of heat, we see that the cold at the north of the great lakes does not represent the same latitude further west, and that beyond them the thermal lines rise as high in latitude, in most cases, as at the west of Europe. Central Russia, Germany, and the Baltic districts and the British Islands, are all reproduced in the general structure, though the exceptions here fall against the advantage, while there they favor it, through the influence of the Gulf Stream." Lieut. Maury remarks:—"The space that these two isotherms 45° and 65° comprehend between the Mississippi and the Rocky Mountains, owing to the singular effect of those mountains upon the climate, is larger than the space they comprehend between the Mississippi and the Atlantic.

"Hyetographically it is also different, being dryer, and possessing a purer atmosphere. In this grand range of climate, between the meridians of 100° and 110° W., the amount of precipitation is just about one half of what it is between those two isotherms east of the Mississippi. In this new country, west of it, winter is the dry, and spring the rainy season. It includes the climates of the Caspian Sea, which Humboldt regards as the most salubrious in the world, and where he found the most delicious fruits that he saw during his travels. Such was the purity of the air there, that polished steel would not tarnish even by night exposure. These two isotherms, with the remarkable loop which they make to the northwest, beyond the Mississippi, embrace the most choice climates for the olive, the vine, and the poppy; for the melon, the peach, and the almond. The finest of wool may be grown there, and the potato, with hemp, tobacco, maize, and all the cereals, may be cultivated there in great perfection. No climate of the temperate zone will be found to surpass in salubrity that of this Piedmont trans-Mississippi country."

As this paper has already exceeded the limits intended, we shall communicate, on another occasion, such observations as we have been able to make with regard to the modifying effect of this climate on disease, and more particularly the tubercular diathesis.†

Rush Medical College, Chicago.—The annual commencement of this school was held on Feb. 5th, 1862, when the degree of M.D. was conferred on thirty-five gentlemen.

* Twelve inches of snow are usually reckoned to make one of water. It will be seen by glancing at the Meteorological Reports of the Rev. Dr. Patterson, above inserted, that twenty inches of snow, in Minnesota, are reckoned to make one of water, and the same gentleman informs me that this is the usual number required.

† The statistics which form the basis of this paper are mainly derived from Blodget's work on the Climatology of the United States, and the United States Army Reports.

TWO CASES OF EXOPHTHALMOS.

By F. J. BUMSTEAD, M.D.,

SURGEON TO THE N. Y. EYE INFIRMARY.

Case I.—*Exophthalmos of Left Eye, dependent upon an intra-orbital tumor and attended with excessive pain.—Excision of the contents of the orbit, with temporary relief.—Subsequent death of patient.*

Henry Levi, aged two and a half years, came under my care at the N. Y. Eye Infirmary, April 17, 1861, for protrusion of the left eyeball. His parents, who were German, could give no account of the history of his case, but stated that the disease was first noticed some eight or nine months previously. Six months before his visit to the Infirmary, the child was brought to Dr. Post's clinique, at the University Medical College, and I am informed by Dr. John H. Hinton, who saw him at that time, that there was then no protrusion of the ball, but simply an abnormal growth, visible through the pupil, in the vitreous chamber. It would thus appear that the disease first commenced within the globe, and afterwards extended to the posterior part of the orbit.

The protrusion of the ball had come on gradually within the four months preceding April 17, 1861, and at this time was very considerable, amounting to about three-fourths of an inch. The lids were very much swollen, and tensely stretched over the protuberant globe, the conjunctiva chemosed, and the aspect of the child peculiarly unpleasant and even disgusting. The haziness of the cornea and the indocility of the child, prevented an accurate appreciation of the condition of the dioptric media. The sight of this eye was entirely lost; that of the opposite was unimpaired. The pain attending this affection was excessively severe; the child, moaning and crying during the greater part of the twenty-four hours, obtained but little rest, had lost its appetite, and was very much emaciated.

The history of the case left no doubt as to the diagnosis, viz. the presence of a tumor, probably of a malignant character, within the orbit. Moreover, the absence of aneurism was established by auscultation.

The experience of the Infirmary having shown that tumors of this character, if removed, almost invariably return within a short period, no encouragement was given to the parents to hope for permanent benefit from an operation; but they stated that they should be satisfied if the child could be relieved, though only temporarily, from its severe suffering. The removal of the contents of the orbit was, therefore, decided upon.

Operation.—Having placed the child under the influence of chioroform, I slit up the external canthus with a bistoury, so as to afford a larger palpebral opening, and freer access to the tumor. I then inserted a strong double ligature through the globe, so as to elevate it from its socket; made a free incision with the knife around the four walls of the orbit, and completed the excision of the whole orbital contents with the curved scissors, taking care to remove every vestige of the soft tissues. The hæmorrhage was less troublesome than had been anticipated, and was easily arrested by filling the cavity of the orbit with pieces of sponge, and applying a compressing bandage around the head.

Examination of the tumor.—The abnormal deposit was found to consist of two portions; one within the ocular tunics, the other posterior to the eye, and surrounding the optic nerve; the two appearing to have no connexion, unless through the optic nerve as a medium. The former, or ocular portion, in an antero-posterior section of the globe, was, upon one side, internal to the choroid and probably also to the retina, while upon the opposite side it was as clearly situated between the choroid and sclerotica; the former being diverted from the latter membrane in this part by, and losing itself in, the abnormal deposit. The latter, or post-orbital portion, extended backwards to near the optic foramen, and involved the optic nerves, the muscles, and other tissues, in an undistinguishable mass.

The deposit, examined under the microscope by Dr. Wm. H. Draper, was found to consist of fibro-plastic material, and no cancer cells could be detected.

Subsequent history.—The child was again brought to the Infirmary, May 17th, when the appearance had so much improved, that it was scarcely recognisable. It had grown quite stout, and, as its father informed me, was entirely free from pain, ate and slept well. There were no indications of a return of the disease; the cavity of the orbit could not, however, be examined, owing to the sinking in and adhesion of the lids.

June 14.—The appearance of the orbit was quite as favorable, but other symptoms of a serious character had supervened. The cervical glands posterior to the left sterno-cleido-mastoideus muscle had become enlarged; the child was complaining of severe pain in the hypogastric and right inguinal regions, could not bear its weight on right leg, passed its water at rare intervals, and its penis was observed to be in a constant state of partial priapism.

The father was directed to bring the child again in a few days for further examination, but never came; and I subsequently learned that the child died early in July. The particulars of its death and the post-mortem appearances are unknown.

Case II.—*Exophthalmos of both eyes, dependent upon a tumor at the base of the brain.—Death.—Autopsy.*

Lydia M. Herkimer, aged 13, came under my care at the N. Y. Eye Infirmary, December 6, 1858, for protrusion of both eyeballs. Patient has single, and her father double hare-lip. General health good, with the exception of otorrhœa of right external meatus, which persisted from infancy until within a few months, when it disappeared.

The protrusion of the globes was first noticed by her friends in August, 1858, and at this time patient began to experience intermittent attacks of pain in forehead, and bridge of the nose. Her sight soon afterwards became impaired.

Both eyes now protrude to such an extent, that the globes can almost be enucleated by retracting the upper and lower lids. Pupils dilated and inactive. Sight so dim that she cannot find her way about alone. She is constantly drowsy; sleeps much; and, her mother asserts, appears much more stupid than formerly. For the last few days there has been a thin purulent discharge from right nostril; and the respiration upon this side is obstructed. No aneurismal thrill or murmur can be detected by palpation or auscultation. No enlargement of thyroid gland.

Subsequent history.—In spite of various internal remedies that were employed (iodide of potassium, cod-liver oil, tincture of thuja occidentalis, sulphate of quinine, etc.) the disease continued to progress. The globes, in addition to their protrusion, became widely separated, so that the bridge of the nose appeared of an enormous width, and the patient presented a peculiar staring aspect. The right side of the nose became quite prominent, and a firm nodulated tumor could be seen in the right nostril. Several severe attacks of hæmorrhage also took place from this nostril. Another prominence was noticed upon the supra-orbital ridge, slightly to the left of median line, as if a tumor were projecting at this point through an opening in the frontal bone. The pain became excessively severe, and was sufficient to prevent sleep, although patient complained of constant drowsiness. No amelioration of symptoms followed, and death took place from exhaustion, July 13, 1859.

Autopsy.—Twelve hours post-mortem. Considerable œdema over os frontis.

Upon removing calvarium the dura mater covering the left anterior fossa of the base of the cranium was found to be elevated by a tumor beneath, and the left hemisphere of the brain, although separated from the tumor by the dura mater, which was intact, was in a state of putrefaction. Upon further examination it was found that the tumor occupied a bed formed at the expense of various bones of the face and cranium. So far as could be ascertained, its point of origin was in the region of the ethmoid, whose cribriform plate and ossa plana had entirely disappeared. The commissure of the optic nerve could just be distinguished in a mass of putrefaction. The orbital plates of the os frontis were much eroded, and a circular opening was found, formed by the destruction of the internal angular processes of the last named bone and both nasal and lachrymal bones. With the exception of their bony walls, the orbits were not encroached upon by the adventitious deposit. Proceeding downwards, the tumor was found to have made for itself a passage, at the expense of the turbinated bones, the septum nasi and palate processes of the superior maxillary, as far as the mucous membrane of the roof of the mouth; so that one finger thrust along this track from the cranial cavity would meet a second finger introduced into the buccal cavity, with merely a layer of thickened mucous membrane intervening between the two. The opening in the bony palate equalled a twenty-five cent piece. Of the bones thus sacrificed in the growth of the tumor, only a few small spicula remained. The internal wall of the antrum on either side had also disappeared.

The adventitious deposit was a soft, brain-like substance, through which the finger could readily be made to pass with very slight resistance. A portion, which was reserved for the microscope, was unfortunately mislaid.

The extreme degree of the exophthalmos, in view of the fact that the contents of the orbits were not implicated; the extent of the adventitious deposit: and its predilection for bony tissue, were remarkable features in the case.

162 West 23d Street.

Reports of Hospitals.

NEW YORK HOSPITAL.

INJURIES OF THE HEAD.

THEIR NATURE AND TREATMENT, WITH ILLUSTRATIVE CASES

By D. B. St. John Roosa, M.D., and James L. Little, M.D., Resident Surgeons.

(*Continued from page* 152.)

DEPRESSED FRACTURE OF THE OUTER TABLE OF THE PARIETAL BONE.—RECOVERY.

VIII.—Martin Garrety, æt. 33, Ireland, laborer, admitted July 8, 1861 (Dr. Peters, attending surgeon). Patient, while in a fight, was struck on the head with the back of an axe. On admission was suffering from no cerebral symptoms, being able to walk to the ward. There was a scalp wound over the left parietal bone, and fracture of the skull, with a depression exceeding one-eighth of an inch. The scalp wound was enlarged by a crucial incision and a careful examination made of the fracture, which was found to be a double camerated fracture of about an inch and a quarter in length. Patient's bowels kept freely opened. At the end of six weeks the depressed portions of the outer table separated and were removed. On examination the inner table of the bone seemed to be uninjured. The wound closed by granulation, and in two months from time of injury patient was discharged cured. It might be remarked in connexion with this case, that the only unpleasant cerebral symptom which showed itself was the frequent occurrence of frightful dreams; these, however, disappeared in the latter part of the treatment. We may also remark that a consultation was held on this case, and the question as to the elevation of the depressed fragment was discussed, but in the absence of all cerebral symptoms, it was deemed advisable to wait, and the subsequent history of the case showed the propriety of the decision.

COMPOUND FRACTURE OF FRONTAL BONE.—RECOVERY.

IX.—A man, æt. 38, Ireland, carman, admitted December 17, 1861 (Dr. Watson), a short time before was knocked off a hay loft, falling ten feet. Received a compound fracture of the frontal bone of right side, just above and a little external to inner extremity of superciliary ridge. External

wound lacerated; external table of bone depressed; pupils sluggish; pulse 90; mind clear. Has also a fracture of the right radius near wrist-joint. Did well, without bad symptoms, and thirty-eight days after was discharged cured.

COMPOUND FRACTURE OF THE SKULL AND OTHER INJURIES.—OPERATION.—DEATH.

X.—Patrick Herring, æt. 40, admitted April 7, 1861, fell from the yard-arm of his ship and sustained a compound fracture of the skull, involving the frontal and parietal bones; he had also a compound fracture of the right femur, and a compound fracture of the right arm. An operation was performed by Dr. Buck, the attending surgeon, with the gnawing forceps, and succeeded in removing about twenty fragments of the right parietal and temporal bones. Patient revived sufficiently to answer questions intelligently. Thirty-six hours after the injury he died. No autopsy.

FRACTURE OF TEMPORAL BONE.—EPILEPSY.—DEATH.

XI.—A woman, æt. 35, Ireland, servant, admitted Dec. 4, 1861 (Dr. Watson), was found on the sidewalk, apparently in an epileptic fit. This continued when seen by the surgeon. Scalp wound to right of occipital protuberance, somewhat circular in shape; being enlarged, no fracture was detected. In a short time she recovered from the epileptic seizure, and was conscious. She said she had been subject to epileptic attacks for a number of years. In a few hours another convulsion occurred. These were followed by others in rapid succession, continuing for three days, when she died. *Post-mortem* showed a fracture of the skull, beginning at a point about the middle of the squamous portion of the temporal bone, and extending very near the enlargement of the external wound. No depression of bone. Clot just below seat of fracture; also on corresponding point of opposite side. Had also a scirrhous tumor of posterior wall of uterus.

FRACTURE OF ETHMOID BONE.—FRACTURE OF THIGH.—DEATH IN TWO DAYS.—AUTOPSY.

XII.—A man, æt. 29, Holland, seaman, admitted Dec. 25, 1861 (Dr. Watson), while leaning upon a barrel which was being hoisted through a hatchway, his support gave way, and he was precipitated forward, and fell a distance of about eighteen feet. Found a wound of brow and eyelid not seeming to connect with fracture; also a fracture of thigh; suffering from shock; pulse 100; surface cold; intellect dull; pupils sluggish. Rallied in a few hours. Became delirious the next day, but had intervals of quiet sleep; pulse 100 and weak; bowels moved, and ordered hirud. medicinal., No. vi., to temples. Delirium subsided, but patient has become unconscious; pupils immovable; pulse 120. Died on 27th. Post-mortem found a fracture of the crista galli, depressed and comminuted, meningitis and encephalitis.

COMPOUND FRACTURE OF SKULL FROM DIRECT VIOLENCE.—OPERATION.—FUNGUS CEREBRI.—DEATH.—AUTOPSY.

III.—Mary Ann Webber, æt 27, England, married, was admitted December 5, 1861 (Dr. Buck, attending surgeon). Patient, while engaged in a domestic broil, was struck on the head with the edge of a hatchet. On admission she did not appear to be suffering much from the effects of the injury; her intellect was good; she was able to walk, and no symptoms of concussion were present. On examination an incised wound of about three inches in length and half an inch in width was seen, running diagonally across the left parietal bone; there was a corresponding cut through the bone, through which brain matter was oozing. There was also an incised wound of the left arm, produced by the same instrument.

At the visit of the attending surgeon it was deemed advisable to perform an operation, as from the character of the injury it was supposed that the inner table of the bone was fractured and depressed. Patient was etherized, and an incision made transversely across the wound, and the four flaps raised. A portion of the bone was then removed by the rongeur forceps, and the inner table was found to be fractured more extensively than the outer, and a considerable number of loose fragments were removed, some of which were driven through the dura mater, and were deeply imbedded in the brain substance. The flaps were then brought together with sutures, and a slight compress applied. Forty-eight hours after injury.—Patient in good condition; no symptoms of compression; no paralysis. On the third day patient had lost the power of motion of right arm and leg; bowels kept free, and cold water dressings applied to the head. Fourth day.—Patient suffered from convulsive twitchings of the muscles of the left side of the face; these twitchings were not noticed in any other part of the body. A bloody fungous-looking mass of brain substance gradually protruded from the wound, pulsating synchronously with the heart; this was treated merely by cold water dressings. Coma gradually came on, and death occurred on the sixth day after the injury.

Post-mortem examination showed that the fracture involved the left and right parietal bones, and on the left side the fissure extended down to the base of the skull, involving the petrous portion of the temporal bone. A considerable quantity of blood was found in the vicinity of the wound, between the dura mater and the skull. The brain matter was much softened and disorganized, the laceration extending down to the left lateral ventricle. The ventricle on the opposite side was found filled with bloody serum. The surface of the brain was much congested. Other organs healthy.

The most interesting feature of this case was the slight amount of cerebral disturbance from such a severe injury. The edge of the axe had evidently buried itself into the brain matter down to the lateral ventricle. It also shows the necessity for an operation in such cases, as the inner table is more extensively fractured than one would be led to suppose from the external appearance of the wound.

COMPOUND FRACTURE OF SKULL.—COMPRESSION BY EFFUSED BLOOD.—RUPTURE OF MIDDLE MENINGEAL ARTERY.—DEATH.

IV.—A. J. F., æt. 28, admitted January 1, 1862 (Dr. Peters). Patient, while engaged in a fight, was struck in the head with a cheese-knife, and afterwards with a club. On examination there was found over the left paricta bone a scalp wound, and a chipping off of the external table of the bone; a contused wound was also discovered over the right parietal bone, near the vertex, and further examination revealed a fracture of the bone with slight depression. At the time of admission patient was somewhat intoxicated, but conscious, answering questions intelligibly; he gradually fell into a comatose condition. Other symptoms of compression followed, and gradually increased until twelve hours after the injury, when he died.

Post-mortem examination revealed a fracture commencing in the right parietal bone, and extending through the temporal and right wing of the sphenoid to the base of the skull. About an inch of the groove for the middle meningeal artery was involved in the fracture. A large clot of blood weighing over four ounces ($\frac{z}{}$ iv.) was found between the dura mater and the bone, resulting from a rupture of the middle meningeal artery.

COMPOUND FRACTURE OF THE SKULL.—PYEMIA AND DEATH.

V.—Winnie Collins, æt. 30, Ireland, admitted September 22, 1861 (Dr. Parker, attending surgeon). Patient, while engaged in hanging clothes on a line, fell off a shed to the ground, a distance of about twenty feet. On examination a lacerated wound of about one inch in length was found, without any depression, over the right frontal eminence; further examination revealed a fracture of the bone. The limits of the fracture could not be made out through the wound. Patient was suffering from no cerebral symptoms. There was also a fracture of the right femur, and a small wound over the left knee. Cold water dressings were ap-

plied to the wound of scalp and of knee, and Dr. Buck's extension apparatus applied to the fracture. The day after the injury there was ecchymosis under the right conjunctiva. Patient progressed favorably until the twelfth day, when she had a severe chill followed by profuse sweating; these chills recurred daily for several successive days. The treatment was tonic in character—quinine, brandy, and beef-tea being given. The wound of the scalp appeared to be dry and glazy; the secretion of pus was changed to a thin ichorous discharge. Patient continued to sink, and *died* on the twentieth day.

Post-mortem examination ten hours after death.—On examination of the skull the fracture was found to involve the frontal, parietal, and right temporal bones, and also extending through the orbital plate of the frontal bone, without any depression. A collection of pus was found on both sides of the dura mater, under the right frontal bone, not circumscribed, and making but little pressure on the brain. Pus was also found in the cellular tissue about the neck, in the anterior mediastinum, in the knee-joints, and around the fracture of femur. No collections of matter were found in the lungs or liver.

COMPOUND FRACTURE OF THE SKULL.—DEPRESSION.—OPERATION.—DEATH.

VI.—Pat Conelly, æt. 35, Ireland, was admitted October 2, 1861 (Dr. Buck, attending surgeon), having received his injuries in an unknown manner. On admission to the hospital he was in a comatose condition; pulse 60, infrequent and slow; respiration stertorous. A scalp wound over the parieto-occipital suture was found, connecting with a depressed fracture involving the occipital and parietal bones.

Stimulating enemata were administered, and warmth applied. On the arrival of Dr. Buck, the attending surgeon, a portion of bone was removed with the rongeur forceps, and the depressed portion raised; the dura mater was found torn, and the brain substance lacerated. There was severe arterial hæmorrhage from one of the vessels of the brain, requiring the application of ligature. Patient survived six hours after the operation, and then sank. No autopsy was permitted.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, January 22, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

GASTRITIS FROM CORROSIVE POISON.

Dr. Bauer exhibited the stomach of a woman who had recently died after a short illness under suspicious circumstances. She had left her home in the morning at ten o'clock, and returned at half past two, when she complained of intense thirst, and a burning sensation in the throat and stomach. She vomited incessantly, and had frequent stools. At half past nine P.M., she expired. At the legal investigation it was ascertained that she had committed suicide to obviate giving evidence against her husband, then in jail under indictment. The contents of the stomach—a bloody, semi-gelatinous fluid—had been chemically analysed, and the presence of arsenious acid detected. The inflammation of the stomach was most intense, involving, however, the mucous membrane only, which was softened, easily peeled off, thickened, and of a bright red color. About the cardia the inflammation was least, but at the posterior wall and near the pylorus the effects of the poison were most marked. At the latter place the mucous membrane was raised, being of a dark bluish color, and charred. The upper portion of the small intestine had participated in the inflammation. The peritoneum of the liver had been moderately inflamed, but the rest of the membrane intact. How long the poison had been in the stomach could not be accurately ascertained, but not less than seven hours. Dr. Bauer presented also the uterus of the same woman, which showed a large oval cavity in the neck, instead of a narrow and more cylindrical passage. There were no evidences of impregnation present; the lower os was open, and the distension could not therefore be attributed to any mechanical obstruction.

EXPECTORATION OF DIPHTHERITIC CASTS.

Dr. Sands presented a membranous cast of the trachea, bronchi, and larger divisions of the bronchial tubes, which had been expectorated by a girl aged eleven years, who was attacked with diphtheria on the 20th instant. The specimen was sent from Dr. Kinch, of Westfield, N. J., to Dr. Parker, with the simple statement that on the fifteenth day of the disease, in a fit of coughing, the membrane was discharged. Subsequent to this the breathing became easier, but she refused to swallow anything, even water, and died in the course of the next two days. No post-mortem examination was made. The specimen was interesting, as illustrating the fact that the false membrane in such cases extended below the bifurcation of the bronchi.

Dr. Garrish referred to three or four cases, which had come under his notice, of false membrane extending into the bronchi. In all tracheotomy was performed, but of course without success. One of these occurred in the person of his own child, who was tracheotomized for croup six hours after the first symptom showed itself, and who died ten hours after the operation was performed.

Dr. Post remarked that some time ago he made a post-mortem examination in a case that died of croup, in which the subject of tracheotomy had been considered, but the supposition that the membrane extended into the bronchi was so strong that the idea of an operation was abandoned. It was not, however, discovered until after death that the membrane was entirely limited to the larynx.

Dr. Sands had seen a case precisely similar to the one referred to by Dr. Post.

Dr. Peaslee, speaking in this connexion of the difference between diphtheria and croup, believed that the former was essentially a zymotic disease, and as such was to be distinguished from simple tracheitis. It was not necessary, in his opinion, that exudation should always be present in diphtheria, but when it did exist there were present also those symptoms accompanying croup, but with the important and formidable addition of the peculiar constitutional symptoms.

Dr. Parker thought it was of the utmost importance to decide between these two diseases, as a matter of treatment. It was easy to make a distinction between marked cases of either affection; but when the characters of each were more or less blended, it became very difficult, if not impossible, to draw a dividing line. He agreed with Dr. Peaslee in reference to the constitutional character of diphtheria as differing from croup, and was satisfied that the treatment of the two affections should vary accordingly. While in croup he had seen the best of results from the internal use of mercurials, mild anodynes, with heat and moisture locally, he was confident that in diphtheria, tonics were always necessary.

Dr. Noyes mentioned the case of a patient who presented himself at the New York Eye Infirmary with a plastic exudation, simply upon the conjunctiva of one eye. Accompanying this deposit were all the constitutional symptoms of diphtheria, and the membrane itself was proved to be diphtheritic by a microscopic examination. The constitutional treatment was tonic in character, while the local applications were of a comparatively mild nature. The patient recovered with perfect vision.

Dr. Conant referred to a patient of the Demilt Dispensary, who had a diphtheritic exudation, covering completely the surface of a burn upon the arm. This case was also treated with tonics, and recovered.

ULCERATION OF ŒSOPHAGUS, ETC.

Dr. Lewis Smith presented a specimen taken from a

child who died in the Nursery and Child's Hospital, at the age of eight months. His health had been good until the 28th of Nov. last, when he was taken with scarlet fever. This disease ran its usual course, and was rather mild. He was supposed to be convalescent on the 7th of the present month, when he was seized with vomiting, which continued for thirty-six hours. He was then in a state of great prostration, the pulse being 180 to 190 per minute. There was no change in his symptoms until death occurred on the 15th. On making the post-mortem examination slight vascularity was found in the larynx, but there was no thickening of the mucous membrane. The lower portion of the œsophagus presented a slate-colored appearance, and in the situation just above the cardiac orifice of the stomach there was found an ulceration about one inch in its widest diameter, extending almost around the circumference of the tube. The upper lobes of both lungs were in a slight degree emphysematous. A portion of the lower lobe of the left lung was partially consolidated, and of a red color, showing the pneumonic cell on microscopic examination. The stomach was considerably inflamed, especially towards its cardiac orifice; the intestines were healthy, the Peycrian patches being rather distinct; the liver weighed nine ounces, and was fatty; the kidneys were healthy. The point of interest in the case was with reference to the ulcer, whether or not it was the sequel of scarlatina. Dr. S. remarked that the pneumonic cell was first described by Dr. Clark. Its presence could be determined by the addition of acetic acid, when granular matter would collect in little masses, somewhat as in pus cells.

FRACTURE OF SPINE; PARAPLEGIA, ETC.

Dr. Finnell presented a portion of the vertebral column and bladder removed from a man who had sustained a fracture of the last dorsal vertebra, by the falling of a large quantity of earth upon him, while engaged in making an excavation. The fractured portion of bone projected back into the spinal column, almost completely severing the cord. Immediate paralysis was the result. It was necessary to use the catheter daily, from the time he entered the hospital, and about the second week he began to suffer pain in the hypogastrium; the urine became loaded with pus, and there was more or less incontinence. About the commencement of the third week a large slough formed upon the sacrum, and upon those prominent portions of the body which pressed most against the bed. He died at the end of the fourth week with symptoms of peritonitis. On post-mortem examination the anterior walls of the abdomen were found firmly adherent to the anterior wall of the bladder. The intestines in the neighborhood were also agglutinated by adhesions. The bladder presented well marked evidences of cystitis, but whether rupture of that viscus had taken place could not, on account of the surrounding adhesions, be made out. The patient was considered perfectly healthy before the injury.

Dr. Bauer remarked that he had some time since come to the conclusion that paralysed organs very rarely took on active inflammation. The case, however, seemed to be a very remarkable exception to a rule which he had almost considered absolute. He had seen patients with paraplegia fall almost every hour in the day, sustaining severe bruises, but they were never followed by active inflammation.

Dr. Post remarked that the death took place sooner than was usual with cases of that sort. The most remarkable instance of bed sores that he had seen was many years ago. A sea-captain, thirty years of age, was attacked with spontaneous paraplegia at Antwerp, but his friends put him on board a sailing vessel for New York and the voyage lasted fifty-two days. He was at the end of that time brought to the New York Hospital, with a bed sore over the sacrum, nearly six inches in diameter, extending fairly down to the bony parts. Over each trochanter was another sore of large size, deep, and cup-shaped.

Dr. Connolly stated, that the man on entering the hospital was remarkably healthy in appearance, and in giving an account of his previous history, said that he had never before ailed anything.

There being no other specimens for presentation, the Society adjourned.

SURGICAL SECTION.

Stated Meeting, Feb. 28, 1862.

DR. JAMES R. WOOD, CHAIRMAN.

DISCUSSION OF DR. GEO. K. SMITH'S PAPER ON THE RELATION OF THE INSERTION OF THE CAPSULAR LIGAMENT OF THE HIP-JOINT TO INTRA-CAPSULAR FRACTURE.

(*Continued from page* 153)

Dr. Post said: Mr. Chairman, I rise for the purpose of explaining certain remarks which I made at a former meeting with reference to Dr. Smith's paper on fractures of the cervix femoris, and which Dr. Smith seems to have misapprehended. In the remarks which Dr. S. made at the meeting of the Section in January, he attempted to show that, in fractures of the cervix within the capsule, there were veins and lymphatics enough remaining in connexion with the upper fragment to account for the absorption of the portion of the neck connected with the head of the bone. I did not intend, in my remarks, to deny the possibility of absorption without previous union of the fragments, but to throw upon Dr. S. the burden of proving that, when union and interstitial absorption both occurred, the absorption preceded the union, and to show that there were some reasons for believing that the union preceded the absorption.

With regard to the objection which Dr. S. made to my classification of fractures of the neck of the femur as being intra-cervical and extra-cervical, as implying that the term extra-cervical as applied to fractures of the cervix involves a contradiction, I admit that the expression is not strictly correct; but it does not involve a greater error than the term extra-capsular fracture of the neck of the femur, as generally employed by surgeons, to indicate a fracture which is situated at the junction of the neck with the shaft of the bone, and not in the proper substance of the neck. In speaking of extra-capsular fractures Dr. Robert W. Smith says, "All extra-capsular fractures are, in the first instance, also impacted fractures, and all impacted fractures are necessarily accompanied by a fracture traversing some part of the trochanteric region. I have omitted no opportunity of investigating this point, and have now examined here and elsewhere upwards of one hundred specimens of the extra-capsular fracture, and have found in all without a single exception a second fracture traversing some portion of the inter-trochanteric space." Dr. Robert W. Smith gives a series of beautiful delineations of extra-capsular fractures, and in every one of them the fracture is at the junction of the neck and shaft of the bone, and is therefore properly extra-cervical. Cruveilhier's elegant and artistic delineations of extra-capsular fractures exhibit the same features. The fact is, that surgical writers, as far as I am informed, all describe these fractures substantially in the same manner. Intra-cervical and extra-cervical fractures are not simply bounded by the capsular ligament on one or the other side. Intra-cervical fractures are near the head of the bone, and extra-cervical fractures encroach upon the shaft. The two classes of fractures have each its distinct physiognomy, and it requires no accurate measurement of the attachment of the capsule to ascertain to which class a particular case may belong. The features of the two classes are as distinct as those of a man and of a baboon. In intra-cervical fractures the neck becomes shortened by absorption, and in extra-cervical fractures the neck is shortened by impaction. I have no knowledge of any cases of extra-capsular fracture which are not also extra-cervical. Whichever of these terms is used it is not strictly proper to speak of them as involving the neck of the bone, but long usage has sanctioned the expression, and it is difficult to abandon it. The same difficulty exists here as in the use of the terms external and internal ring, as applied to the two extremities of the inguinal canal. Surgeons still use

these terms as employed by the older writers, but are obliged to accompany them with the explanation that the internal ring is situated externally, and the external ring internally.

The meeting then adjourned.

American Medical Times.

SATURDAY, MARCH 22, 1862.

THE PUBLIC SERVICES OF PHYSICIANS, AS VIEWED FROM THE HALLS OF CONGRESS.

The National Army, now numbering more than 600,000 men in the field, is said to have an estimated cash value of $600,000,000 merely as a material instrument of war. But when regarded in their actual relations as citizens upon whose lives and labors are dependent the existence and the future prosperity of a great nation, such an estimate of the value of these 600,000 lives is multiplied many fold.

In the Halls of Congress this important question of life's value in the army, and, conversely, the physician's value, as the conservator of life and health, are being earnestly discussed. Homœopathy paraded its pretentions claims, backed by 35,000 petitioners; but impressed by some proper sense of public responsibility, both houses of Congress declined to recommend the hallucinations of Hahnemann to the army. And, for the gratification of our readers, the fact may here be stated that we have just been shown a neatly printed letter copy of our leading editorial of Jan. 18th, "*Homœopathy in Military Hospitals*," which we are informed was ordered printed and placed in the hands of every Member of Congress at the expense of a few public-spirited gentlemen, the very day that number of our journal was received at Washington. Such unanswerable testimony of facts contributed its humble share towards saving the army from the pressure of the host of homœopathic quacks who were just then uttering their bugbear boasts that General McClellan's life had been saved by hourly prescriptions *by telegraph* from the office of the prince of charlatans in New York. Whatever may be safe and to the popular fancy agreeable in domestic life, this vast and precious army had cost too much, and its manly strength was too important to be trifled with by pottering quacks.

Recently the subject of increasing the efficiency of the Medical Department of the Army has been under discussion in both houses of Congress. In the Senate the ball was opened by a protracted discussion, in which the reckless iconoclast, and the minds best balanced and most enlightened, met in earnest argument. The leading points under discussion were:—1st, What is the standing and merit of the regular Medical Staff? 2d, What the standing and the spirit of the volunteer corps of surgeons? 3d, Shall the proposed new law permit the meritorious members of the regular staff to be overslaughed by the volunteer corps, or by the most inexperienced of the staff, in appointments to inspectorial and sanitary offices? 4th, What shall be the assimilated military rank in the several grades and offices of the army medical service?

By all the more intelligent Senators the high professional qualifications of the *regular* staff were affirmed, while for the better class of the volunteer surgeons it was claimed that in respect of large and varied experience, and special accomplishments, etc., they might be regarded as possessing advantages above those of the old staff; but the *esprit du corps*, the high average of qualifications, and the just claims of that staff to the few administrative offices which the new law creates were frankly conceded by the ablest Senators. Said Hon. Senator Nesmith, speaking upon the question of an amendment that would invite all sorts of men to the most responsible places:—

"I believe the adoption of this amendment will have a tendency to disorganize the medical corps of the army. It will deprive those who have devoted their time and attention to acquiring the necessary qualifications to become good Army Surgeons, of the proper promotion which legitimately belongs to the corps. I believe, further, that by throwing it open to the introduction of surgeons from the volunteer corps, neither the corps nor the army will be benefited. It is true, as has been stated on this floor, and as has been stated in committee, that there are a great many distinguished surgeons and assistant surgeons in the volunteer corps. I believe there are as able men there as there are anywhere, but I do not believe they are the class of men who should be selected for the high positions provided in this bill. Many of the gentlemen who are now brigade surgeons of volunteers, are gentlemen who have occupied high positions in medical institutions in the country, who have left a very fine practice, and a fine social position. They have abandoned all this merely *temporarily*, as they supposed, to confer a benefit on the country, and they have conferred great benefits on the country, and great benefits on the army. * * * These gentlemen desire and are anxious when the war is over to return to their former occupation, either to return to their professorships in medical institutions, or to return to the very lucrative practice which they have abandoned in order to accept their present positions. The adoption of the amendment now suggested will throw the medical corps of the army open to a very different class of persons—men who are empirics, quacks, politicians—persons who have never had social or professional position—mere politicians who can bring strong political influence to bear, and they would be the individuals to be selected. The President, of course, is not to be supposed to institute an examination as to the qualifications of these persons, and we all know how easy it is to get recommendations from Senators, from Members of Congress, and from persons of political influence, for offices of this kind. * * * I guarantee that if Esculapius, or Galen, the founders of medical science, were this day living, and were to come here themselves and make application, they would not get sufficient political influence to obtain these appointments."

Notwithstanding such cogent arguments from Senators Nesmith, Rice, Wilson, and Browning, the amendment was adopted by a vote of 26 to 16; and after further amendments, cutting down the rank of officers in the administrative department, the bill was sent to the House of Representatives, where for some days past it has been under discussion. In another column we give a copy of the bill as largely amended and reported by the Military Committee of the House.

From the character of the amendments, or, rather, the substitute reported in the House, it would appear that wise counsels are likely to prevail. The claims, obligations, and professional competence of the regular staff, are amply vindicated, and the paramount importance of the principle of special selection from that staff for all the higher *administrative* offices of the re-organized Medical Depart-

ment is boldly and justly asserted. With certain modifications in the details of that bill it will most happily meet the exigencies of our Grand Army, and satisfy the long deferred wishes of the staff and the profession generally for the proper recognition and enlargement of the functions of the Army Medical Service.

The bill creates a special department of administrative and inspectorial service to be added to the central bureau; and it provides conditions of rank and pay adequate to the proposed changes. The selection of the Surgeon General, and ten other chief officers of the administrative branch of the service, is committed to the President, and that selection is limited to the regular staff. It appears to be supposed, that as the principle of selection is to be applied only in the limited class of appointments here named, the *esprit du corps* and thorough system of military subordination and relative ranks in the staff will not be seriously disturbed by the proposed innovation. This is an important question, and we believe that it would be settled to the entire satisfaction of the staff, if the new Act would provide that three of the most experienced members of the staff should serve as a council to the President concerning such appointments; or, what would be, perhaps, more practicable, if the Surgeon General, Sanitary Inspector General, and Assistant Surgeon General, were constituted an *ex officio* Council to designate the most competent and meritorious officers for the eight inspectorships, and to act also as a Council of Administration upon all the more important questions that come before the Medical Bureau. It is also due to the whole staff that the increased rank of the administrative officers should only be assumed and enjoyed during their continuance in the administrative department. These amendments can readily be adopted at the present stage of the medical bill, if the resident members of the Staff at Washington will suggest them.

THE WEEK.

The Chicago *Medical Examiner* strongly urges the meeting of the American Medical Association next June:—

"We think there has been no time in the history of the country, when our Medical Societies, both local and general, could be more useful than at present. We are glad to see that such State Societies as have recently held their annual meetings, have been well attended. For ourselves, we can say to our brethren elsewhere, that we shall greet them in our goodly city with the greatest pleasure. We trust, the proper notices will be issued by the Secretaries and Committee of Arrangements, without delay."

We trust there will be no delay in issuing the official notice of the meeting. It is well stated that "there has been no time in the history of the country, when our Medical Societies, both local and general, could be more useful than at present." Questions of great practical interest have arisen since its last meeting which demand discussion and settlement. If we had any doubt whatever in regard to the propriety of this meeting, it would be as to the place; if it is very desirable, as is alleged, that "our southern brethren" meet with the Association, it might perhaps be well to hold the meeting at Nashville, Richmond, or Charleston.

—

After the battle at Ft. Donelson, the Chicago Sanitary Commission sent eighteen surgeons to assist in the care of the wounded. The citizens of Cincinnati contributed a large sum of money, and furnished a cargo of hospital stores, and a number of its most competent surgeons. These acts of generous care of the wounded relieve war of some of its most unpleasant aspects.

—

Our city medical schools have all closed with appropriate ceremonies, graduating in the aggregate somewhat less than two hundred students. The valedictory addresses were given:—In the New York Medical College, by Prof. Percy; in the University Medical College, by Prof. Van Buren; in the Bellevue Hospital Medical College, by Prof. Elliot; in the College of Physicians and Surgeons, by the President, Dr. Delafield. The annual address before the alumni of the latter school was given by Dr. Brown, of the Bloomingdale Asylum.

—

The joint Committee of the two Houses of the New York Legislature have reported a Metropolitan Health Bill, which, though not what the most earnest friends of sanitary reform could wish in all its details, is still worthy of their cordial support. It contains the Metropolitan feature, it gives to the Board a predominant medical element, and abolishes all the existing combinations which go to make up our health organizations. If the measure proves defective it can be remedied hereafter; at present let us accept this bill, and unitedly strive to obtain its enactment.

—

The following is a copy of the Bill for reorganizing the Army Medical Department, as amended from the Senate Bill, and at present under discussion in the House of Representatives.

S. 188. AN ACT [To increase the efficiency of the medical department of the army.] To reorganize and increase the efficiency of the medical apartment of the army.

March 11, 1862.—Read twice, and referred to the Committee on Military affairs.

March 12, 1862.—Reported back with an amendment in the nature of a substitute, ordered to be printed, and the further consideration postponed till Tuesday, the 18th instant.

Amendment.—Strike out all after the enacting clause, and insert the following:—

That there shall be added to the present medical corps of the army ten surgeons and ten assistant surgeons, to be promoted and appointed under existing laws, twenty medical cadets, and as many hospital stewards as the surgeon general may consider necessary for the public service.

Sec. 2. *And be it further enacted*, That the surgeon general to be appointed under this act shall have the rank, pay, and emoluments of a brigadier general. There shall be one assistant surgeon general and one medical inspector general of hospitals, each with the rank, pay, and emoluments of a colonel of cavalry, and the medical inspector general shall have, under the direction of the surgeon general, the supervision of all that relates to the sanitary condition of the army, whether in transports, quarters, or camps, and of the hygiene, police, discipline, and efficiency of field and general hospitals, under such regulations as may hereafter be established.

Sec. 3. *And be it further enacted*, That there shall be eight medical inspectors, with the rank, pay, *and emoluments each of a lieutenant colonel of cavalry*, and who shall be charged with the duty of inspecting the sanitary condition of transports, quarters, and camps, of field and general hospitals, and who shall report to the medical inspector general, under such regulations as may be hereafter established, all circumstances relating to the sanitary condition and want of troops and of hospitals, and to the skill, effi-

ciency, and good conduct of the officers and attendants connected with the medical department.

Sec. 4. *And be it further enacted,* That the surgeon general, the assistant surgeon general, medical inspector general, and medical inspectors, shall immediately after the passage of this act be appointed by the President, by and with the advice and consent of the Senate, by selection from the regular medical corps of the army, without regard to their rank when so selected, but with sole regard to qualifications.

Sec. 5. *And be it further enacted,* That medical purveyors shall be charged, under the direction of the surgeon general, with the selection and purchase of all medical supplies, including new standard preparations, and of all books, instruments, hospital stores, furniture, and other articles required for the sick and wounded of the army. In all cases of emergency they may provide such additional accommodations for the sick and wounded of the army, and may transport such medical supplies as circumstances may render necessary, under such regulation as may hereafter be established, and shall make prompt and immediate issues upon all special requisitions made upon them under such circumstances by medical officers; and the special requisitions shall consist simply of a list of the articles required, the quantities required, dated, and signed by the medical officers requiring them.

Sec. 6. *And be it further enacted,* That whenever the inspector general, or any one of the medical inspectors, shall report an officer of the medical corps as disqualified, by age or otherwise, for promotion to a higher grade, or unfitted for the performance of his professional duties, he shall be reported by the surgeon general for examination to a medical board, as provided by the seventeenth section of the act approved August third, eighteen hundred and sixty-one.

Sec. 7. *And be it further enacted,* That all acts or parts of acts inconsistent with the provisions of this act be, and the same are hereby, repealed.

Correspondence.

EXCISION OF THE OS CALCIS,

ARTICULATORY SURFACE OF THE ASTRAGALUS, CUBOID, AND TARSAL EXTREMITY OF THE FIFTH METATARSAL BONE, FOR CARIES.

[To the Editor of the American Medical Times.]

Sir:—Judging from the numerous reports of cases of conservative surgery scattered through the different periodicals of this country, the American surgeon justly deserves the credit of having, *at least,* assisted in extending the domain of that branch of modern surgery devoted to saving and restoration of diseased and mutilated portions of the human body.

The success thus far attained, fully attesting the merits of conservative surgery, has been so encouraging, and in many instances so little expected, as to leave no doubt that far more may be accomplished, and still greater triumphs achieved, by those who, relying on nature's inexhaustible resources, allow themselves to be guided by patience, perseverance, and gentleness, in their dealings with surgical cases. Trusting, as the true and rational *physician* is taught to do, to the vis medicatrix naturæ in the attendance of internal diseases, assuming to himself merely the office of minister and assistant, while leaving to her the full sway of her restorative energies, ever watchful of removing obstacles to her curative efforts, and always ready to assist her where assistance is needed, the *surgeon* for centuries past, unmindful of the golden precepts with which the physician as minister of nature approaches disease, has been too wont to disregard her recuperative powers, and to seek renown in mutilation and destruction. But thanks to the progress of the present age in science, and to the labors of those who have devoted themselves to the study of nature's resources, his mission, through a more correct knowledge of surgical pathology, with an unlimited reliance in life's restorative power, has been greatly changed. The smiles of restoration now greet his path where formerly the despair of destruction followed him.

Considering it the duty of each one to give publicity to individual experience, when of interest (especially at the present time), of cases confirmatory of the success of conservative surgery—which extends over a vast field, new and but little explored—I hope it will be acceptable to the readers of your valuable journal to refer them, in connexion with the case of Dr. Bradford, reported Jan. 18, 1862, in the American Medical Times, to that of Dr. A. G. Walter, of Pittsburgh, Pa., which was published in the *Medical and Surgical Reporter* of Philadelphia, October 29, 1859, relating the complete restoration of a foot in a young woman of scrofulous constitution, with caries of the astragalo-calcanean articulation of many years' standing, by the excision of the os calcis, the articulatory surface of the astragalus, the cuboid and the tarsal extremity of the fifth metatarsal bone. The report says:—"More than three years now having elapsed since the operation, the heel is still full, plump, and rounded, a thick cushion of cellular and adipose tissues occupying the place of the lost calcaneus, the patient walking with ease, and without halt or lameness, wearing a common shoe, and being in the enjoyment of perfect health."

A Subscriber.

March 1, 1862.

DOMESTIC CORRESPONDENCE.

PHILADELPHIA.

March 8th, 1862.

The first of the year brings, as usual, changes in medical matters as well as in everything else. Not the least important are the elections for the officers of the societies. We note a great change in the College of Physicians. The Secretary, Dr. Edward Hartshorne, having declined a re-election, has been succeeded by Dr. John H. Packard, whom you may have heard of by a translation of Malgaigne's Work on Fractures. This is about all worthy of note, as the other officers remain pretty much as for some time past, including the famous "building committee." By the way, they must intend to build, as they do talk of advertising for proposals, etc. *Nous verrons.*

In the Philadelphia County Medical Society, the election resulted in the choice of Dr. Alfred Stillé for President (Dr. S. is well known by his valuable work on Therapeutics, recently issued); Drs. Harry Hartshorne and Joshua H. Worthington for Vice-Presidents; the former, ex-professor of practice in the defunct Philadelphia and Pennsylvania Medical Colleges, now "Professor of Physiology and Hygiene" in the central high school of this city; the latter, chief physician to the Friends' Insane Asylum, at Frankford; Treasurer, Dr. Andrew Nebinger, and Recording Secretary, Dr. Wm. B. Atkinson, both re-elections; the latter was a quondam editor of the Medical and Surgical Reporter of this city, obstetric editor of the N. A. Medico-Chirurgical Review, and I believe at its last session, held a subordinate position in the obstetric department of the Pennsylvania Medical College; Dr. James M. Corse, Corresponding Secretary, formerly a lecturer at the Nurses' Home; Dr. A. H. Fish, Assistant Recording Secretary; and Dr. Geo. Hamilton as Censor for five years.

The Pathological Society still has Drs. John K. Kane, a brother to the Arctic explorer, and Dr. Packard, before mentioned, as its secretaries.

The Northern Medical Society, located in the extreme northern part of the city, elected Dr. Owen Osler as President; Dr. A. M. Slocum, Vice-President; Dr. Wm. B. Atkinson, Recording Secretary; Dr. Wm. Maybury, Corresponding Secretary; Drs. Atkinson and Saml. N. Troth, Reporting Secretaries; Dr. J. H. Smaltz, Treasurer, and

Drs. N. L. Hatfield, J. Rhein, Joseph R. Bryan, Lewis P. Gebhard, and Charles Wittig, as Counsellors.

These are all the medical societies our city affords, the clubs, etc., not being entitled to the name, as the latter assemble, not to discuss medicine or disease, but oysters, coffee, and the etceteras.

Speaking of societies, I am informed that Dr. Atkinson, who has for many years filled the post of Secretary of the County Medical Society, purposes issuing this spring, a volume of the discussions held at the monthly conversational meetings. This is a move in the right direction. Much valuable matter has been lost to the world of medicine, for want of just such a publication; and I wish him success in the enterprise, though I fear he will scarcely pay expenses, let alone receive any pecuniary advantage by his efforts. Should it be successful, I understand that each year such a volume will be issued, including the debates at the conversational meetings from September to March of each year. This year, the debates were upon Puerperal Fevers, with a valuable paper by Dr. Nebinger; Infantile Remittent Fevers, by Dr. Winthrop Sargent; Variola, by Dr. John Bell; Veratrum Viride, by Dr. Atkinson; Nature and Art in the cure of disease by Dr. D. F. Condie; and the March debate will be upon Fever and Inflammation by Dr. Wm. Darrach. From the calibre of the men who opened the debates, valuable papers were expected, nor were their hearers disappointed, and the discussions were ably continued by many prominent members. The forthcoming volume is looked for with much interest, though, as no public announcement has yet been made, I am unable to say whether it will be offered to all, or merely to the members of the society.

To-day was commencement day at the "Jefferson," and the latter part of next week the same ceremony will take place at the University. Both having *slightly* reduced matriculating lists, expected rather small lists of graduates; their expectations have been more than realized. Under misfortunes cheer up, look at the bright side, as witness the newspaper remarks as to the increased advantages obtained by the students this winter, *the professors having more time to devote to* EACH *individual*, etc., etc. Bravo!

The long expected advance *being about to be made*, further deponent saith not. Our medici are on the *qui vive* about going to Washington for a few days. In consequence, the private committee alluded to in a former epistle, expect to have their list called for, but lo! it appears the governor or some other man of authority has taken it in charge, and private notes have recently been sent to certain persons, requesting to know if they will volunteer for two weeks, etc. What's to be done? All cannot go, nor would they be accepted; nor perhaps would they be required. I hope, none may be; and it could be so, if our army of the Potomac were similar to our glorious Western men, who are scaring the rebels so that they do not stop to fight. But a truce to this subject, for we correspondents of the press are under military law, and I may be emitting some *great secret*.

Yours, etc.,

A. M. Leon, M.D.

Obituary.

DR. A. V. WILLIAMS.

The announcement of the sudden decease of the late A. V. Williams, M.D., on Friday, February 28th, brought sadness and desolation to many hearts.

Dr. Williams commenced his career as Resident Physician to the Bloomingdale Insane Asylum in 1823, which office he filled for several years. After his marriage he decided to pursue his profession in the immediate neighborhood of the Institution (the village of Manhattanville and Bloomingdale), where he had, at this early period, many warm and devoted friends. For five and thirty long years, through storm and through sunshine, 'mid summer's heat and winter's snows, he has faithfully discharged the duties of his calling, and secured the confidence and love of the entire community. He was, indeed, "the beloved Physician." Time is not allowed us to enumerate the various offices which he has filled as a public-spirited citizen and philanthropist; this duty must be reserved for his biographer. He died of pleuro-pneumonia, contracted by exposure in the discharge of his professional duties; the attack proving fatal after five days' illness. His age was 60 years. His obsequies were attended at the village church of St. Michael's, on Sunday afternoon, when the tears of the multitude of his friends and patients bore testimony to their attachment, and of their grief at his departure.

Cut down in the strength of his manhood, and in the midst of his usefulness, how are we reminded "what shadows we are and what shadows we pursue."

"Mors sola fatetur, quantula sunt hominum corpuscula."

A.

Death of Dr. William Murray.—At a meeting of the Board of Physicians and Surgeons of St. Vincent's Hospital, held in the Institution, March 8, 1862, Dr. James O'Rorke in the chair, the following preamble and resolutions were unanimously adopted:

Whereas, The Almighty in his inscrutable providence has seen fit to remove from our midst Dr. William Murray, a graduate of the University of Edinburgh, for thirteen years Visiting Physician, and late Consulting Physician to this Institution, therefore

Resolved, That we, the physicians and surgeons of St. Vincent's Hospital, deeply deplore the loss of our esteemed friend and associate, whose noble qualities of head and heart had endeared him to us in common with all those who knew him.

Resolved, That we attend the funeral of our deceased friend and associate, and wear the usual badge of mourning for thirty days.

Resolved, That a copy of these resolutions be sent to the family of the deceased.

Resolved, That the foregoing resolutions be published in the American Medical Times, and also in the daily city journals.

J. J. Connolly, M.D., *Sec'y.*

Medical News.

Explosion in Mines.—By the appalling catastrophe at the New Hartley Colliery, accounts of which were daily, nay hourly, read with such painful anxiety, not only by those who were in some way connected with the mine, but by the public in general, no less than 215 men and boys, as sturdy and as healthy as any in England, after being imprisoned for some days in the bowels of the earth, were suffocated. Such a loss of life, from any sudden accident in Great Britain, has not taken place since the rebellion of 1745. We can only compare it to a battle-field after an engagement, or the scourge of that dire epidemic disease, cholera.—*Lancet.*

A Royal Commission has been appointed, including Dr. Headlam Greenhow and Mr. P. H. Holland, charged with the duty of inquiring into the condition of all the mines in Great Britain, with reference to the health and safety of persons employed.

LIST OF THE NAMES OF SURGEONS AND ASSISTANT SURGEONS APPOINTED TO THE VOLUNTEER REGIMENTS OF THE STATE OF NEW YORK, SINCE FEB. 20, 1862, AND THE CHANGES WHICH HAVE OCCURRED IN THE REGIMENTS IN THE FIELD FROM THE SAME DATE.

Feb. 25, 1862.—Hartwell C. Tompkins, M.D., Assist. Surgeon 61st Reg., vice Andrew Merrill resigned. Feb. 10.—Lawrence Reynolds, M.D., promoted from Assist. Surg. 24th Reg. to be Surgeon of 68d Reg., vice David R. Shanahan dismissed; A. D. Ruggles, M.D., Assist. Surg. 68d Reg., vice Michael G. Gilligan dismissed; S. Hiram Plumb, M.D., Assist. Surg. 24th Reg., vice Lawrence Reynolds promoted. March 7.—Nelson D. Ferguson, M.D., Surgeon 8th Reg., Cavalry, vice James Chapman resigned; C. R. Vaughan, M.D., Assist. Surgeon 96th Reg. March 8.—S. R. Welles, M.D., Surg. 61st Reg., vice Asa B. Snow dismissed; L. J. Marvin, M.D., Surgeon 97th Reg., vice W. D. Ferguson resigned.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 10th day of March to the 17th day of March, 1862.

Deaths.—Men, 104; women, 92; boys, 129; girls, 110—total, 435. Adults, 196; children, 239; males, 233; females, 202; colored, 6. Infants under two years of age, 165. Children reported of native parents, 30; foreign, 177.

Among the causes of death we notice:—Apoplexy, 10; Infantile convulsions, 42; croup, 11; diphtheria, 14; scarlet fever, 26; typhus and typhoid fevers, 10; consumption, 77; small-pox, 10; dropsy of head, 19; infantile-marasmus, diarrhœa and dysentery, 22; inflammation of brain, 12; of bowels, 8; of lungs, 31; bronchitis, 6; congestion of brain, 7; of lungs, 2; erysipelas, 7; whooping cough, 8; measles, 2. 287 deaths occurred from acute diseases and 27 from violent causes. 304 were native, and 131 foreign; of whom 94 came from Ireland; 4 died in the Immigrant Institution, and 49 in the City Charities; of whom 26 were in the Bellevue Hospital.

Deaths for the Week ending March 18, 1861		397
" " " "	March 9, 1862	456
" " " "	March 16, 1862	435

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Mar. 1862	Barometer. Mean height.	Barometer. Daily range.	Temperature. Mean	Temperature. Min.	Temperature. Max.	Difference of dry and wet bulb. Thrm. Mean	Difference of dry and wet bulb. Thrm. Max.	Wind.	Mean amount of cloud.	Humidity Sat'tion, 1000
	In.	In	°	°	°	°	°			
8th.	29.80	.20	38	30	45	6	9	W.	0	661
9th.	30.20	.10	38	32	46	6	9	S.	3	661
10th.	30.00	.30	42	34	51	3	4	S.E.	8	800
11th.	30.00	.11	42	34	50	7	13	N.W.	0	587
12th.	30.04	.07	44	37	51	7	11	W.	2	594
13th.	30.20	.20	35	32	40	5	9	N.E.	7	681
14th.	30.10	.14	36	32	40	2	4	N.E.	10	897

REMARKS.—9th, Hazy, P.M. 10th, variable A.M. light rain P.M. 11th, Fresh wind. 12th, variable A.M. clear P.M. 13th, variable A.M. light rain P.M. wind, fresh all day. 14th. Light rain A.M and late P.M.

MEDICAL DIARY OF THE WEEK.

Monday, March 24.	NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M. EYE INFIRMARY, 12 M.
Tuesday, March 25.	NEW YORK HOSPITAL, Dr. Markoe, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.
Wednesday, March 26.	NEW YORK HOSPITAL, Dr. Cock, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Sayre, Is. Hos., half-past 1 P.M. EYE INFIRMARY, 12 M. PATHOLOGICAL SOCIETY, half-past 7 P.M.
Thursday, March 27.	NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Elliot, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.
Friday, March 28.	NEW YORK HOSPITAL, Dr. Markoe, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Flint, half-past 1 P.M. EYE INFIRMARY, 12 M. DR. NOYES'S Lecture, half-past 1 P.M. SURGICAL SECTION, 8 P.M.
Saturday, March 29.	NEW YORK HOSPITAL, Dr. Cock, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Wood's Clinic, 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICES.

INTRODUCTORY LECTURE.—DR. ELSBERG *will deliver a Lecture introductory to a Course on "The Application of Remedies to Disease," at the University Medical College, on Monday, March 24th, at* 11 *o'clock* A.M.

Medical Students are invited to attend.

SURGICAL SECTION.—*This Section will meet next Friday evening, the 28th instant, at the house of the Chairman,* DR. JAMES R. WOOD, *at* 8 *o'clock P.M. Subject for discussion—Tracheotomy, &c.*

All business communications must be addressed to the Secretary, DR. J. P. GARRISH, *No.* 40 *West* 21*st Street.*

Sent Free by Mail on Receipt of Price.

General and Descriptive Anatomy of the Domestic Animals, by John Gamgee and James Law, Professors of Veterinary Surgery. 8vo. London, 1861. $3.75.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

P. W. BEDFORD,

PHARMACEUTIST,

REMOVED TO

745 *Sixth Avenue, near Forty-fourth Street,*

Opposite Sixth Avenue Railroad Depot.

Descriptive Circulars with Samples of Work will be sent mail free.

Having just completed the most successful season's business they have ever enjoyed—wherein they have demonstrated that, *for all kinds of work,* they have "THE SEWING MACHINE OF THE WORLD"—enter upon the New Year with still more IMPORTANT IMPROVEMENTS, the latest being their

"NEW TAILORING MACHINE."

Having heretofore aimed almost wholly to supply a Family Machine, which should do all kinds of family sewing, and HAVING SUCCEEDED, we now enter the market with a Manufacturing Machine, which, for elasticity and strength of stitch—for rapid movements—for simplicity and durability, defies competition. While adapted to make the HEAVY ARMY AND NAVY COATS, with linen thread, it can, by a slight change, be made to do the fine family sewing; thus combining in one machine adaptation to FINE FANCY SEWING and HEAVY MANUFACTURING. This can be best appreciated by those who have owned and operated machines. We do not ask or expect the public to be governed by our statements alone. *We court investigation,* and refer to the thousands who have our machines in successful operation.

FINKLE & LYON SEWING MACHINE CO.,
538 Broadway, New York.

Mason's Sponge Tents and Compressed Sponge have been in use for the past three years by many of the leading physicians of New York, and are pronounced far superior to, while the price is considerably below that of the imported.

For sale in boxes of one dozen assorted sizes, or singly, by the Manufacturer at 251 Eighth Avenue, N. Y.; Schieffelin Brothers & Co., 170 William street; Tiemann & Co., 63 Chatham street; Otto & Reynders, 58 Chatham street; Wade & Ford, 75 Fulton street; Caswell, Mack & Co., Fifth Avenue Hotel.

MANUFACTURED BY

A. MASON, DISPENSING CHEMIST,

251 Eighth Avenue, cor. Twenty-third st., N. Y.

Dr. Squibb's preparations invariably used, and every possible attention given to the Dispensing Department. Trusses, Elastic Stockings, Female Supporters, Shoulder Braces, etc.

Pharmaceutical Granules and Dragees (*Sugar-Coated Pills*)—of

GARNIER LAMOUREUX & CO.,

Members of the College of Pharmacy, Paris.

ALL THE PILLS OF THE U. S. PHARMACOPŒIA.
ALL PREPARATIONS OF IRON, QUININE, SANTONINE, ETC.
ALL THE COMBINATIONS OF COPAIBA, CUBEBS, ETC.
ALL THE ALKALOIDS IN GRANULES OF 1-5 TO 1-50 OF A GR.

These Pills are all covered with a coating of sugar, and present great advantages in the quadruplo point of view, of the exactness of the weight of the medicine, of its perfect preservation, its convenient and agreeable administration, and, above all, its sensibly increased therapeutic action in the form of Dragees.

Agent for the United States, F. A. REICHARD,
61 Walker Street, a few doors West of Broadway, New York.

Sent Free by Mail on Receipt of Price.

Illustrated manual of Operative Surgery and Surgical Anatomy. Edited, with Notes and Additions, by W. H. VAN BUREN, M.D., Professor of Anatomy, University Medical College, and C. E. ISAACS, M.D. Complete in one volume, 8vo., with 118 colored plates, half-bound morocco, gilt tops. Price, $15 00. The same with plain plates, $9 50.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians* (*principally country Physicians*) *Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bourbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of ginten, recovered by sugar as a dragee, neither offend the slight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy*.

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyosciamus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Record says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE

NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.

By SAMUEL R. PERCY, M.D.,

PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE V. PART I.

THE ACTIVE PRINCIPLE OF COLCHICUM—COLCHICINA.

Gentlemen:—Colchicum has been examined by several chemists, but it is not yet clearly determined whether its active principle is an alkaloid or neutral substance. Those who first investigated its properties called it colchicia, or colchiciene, and Oberlin gives the name colchiceine. Pereira has adopted the name I have chosen, and I think it the best and most euphonious of them all.

History.—Pellatier and Caventou first demonstrated in 1820, that an active principle existed in the plant, but they supposed it to be identical with veratria; but to Geiger and Hesse, in 1833, is due the credit of first isolating the principle, in an impure state, and using it in physiological investigations. L. Oberlin (in *Comptes Rendus*, Dec., 1856) states that he has repeated the process of Geiger and Hesse, but was unable to obtain a crystallizable product. I have repeated the experiments of these gentlemen, but have obtained better results by adopting a process differing from either. Mr. J. E. Carter (*Am. Jour. Pharm.*, May, 1858) has adopted a still different plan, and whereas all who preceded him used the seeds, he used the cormus in making his investigations. The product which he obtained appears to be an alkaloid principle, and he gives numerous tests and reagents for its detection, but as I did not see his thesis until after my investigations had been made, and as I have never obtained any of the alkaloid of which he treats, I am unwillingly compelled to leave his principle for discussion at some future time.

Method of Preparation.—The process employed by Geiger and Hesse is as follows:—The seeds are macerated in alcohol, and the tincture obtained evaporated by a gentle heat, and during the process repeatedly decolorized; when sufficiently concentrated by evaporation, an excess of carbonate of soda is added, and the precipitate produced is separated as speedily as possible from the alkaline carbonate by expressing and treating with absolute alcohol. The alcoholic solution is filtered, decolorized, evaporated, and the colchicina allowed to deposit.

By this process L. Oberlin could not succeed in obtaining a crystallizable product. I have found by repeated experiments that this process of Geiger and Hesse produces a compound substance, which is uncrystallizable, and which consists of a resinoid substance in combination with the so-called alkaloid, or rather neutral principle. Oberlin obtained the substance which he calls *colchicine*, in contradistinction from the product called colchicin by Geiger, by treating their uncrystallizable product with water acidified with sulphuric or hydrochloric acids, and evaporating to a syrupy consistence; it is then thrown into water, and a yellowish white precipitate takes place; this is soluble in alcohol or ether, and crystallizes readily. He obtained the same product directly from the seeds, by dissolving the alcoholic extract in alcohol and decolorizing. The syrupy extract which remained after evaporation when dissolved in water, and slightly acidulated with sulphuric acid, gave rise to a flocculent precipitate. The liquid, when filtered and left for some weeks, produced warty acicular crystals.

I have repeated this process, but the result is so small, and so great a length of time is required, that I was led to adopt a different process. It will be observed that this process of Oberlin divides the product of Geiger into two substances, a resinoid and a neutral.

The process that I had adopted for obtaining this principle is as follows. The seeds of the meadow saffron are ground in a coffee-mill, and mixed with about one-third their bulk of animal charcoal, the whole moistened with dilute alcohol, and placed in a percolator. The mass is allowed to stand in the percolator saturated with dilute alcohol for several days; percolation is then allowed to proceed, and dilute alcohol is added until it passes through nearly tasteless. This is concentrated by evaporation to about one-half, and then filtered. Magnesia is now added, and the whole precipitate collected on a filter and dried. The mass is then boiled in alcohol and filtered, treated with carbonate of soda until a precipitate no longer forms, but carefully avoiding an excess of the soda, and filtered at once. This gives a fawn-colored powder, which may, if required, be crystallized from very dilute sulphuric or hydrochloric acids. The amorphous precipitate should be rendered still lighter in color by repeated solutions in alcohol and precipitations by soda; but it is accompanied by great loss, as it is quite soluble.

Physical and Chemical Properties.—The product obtained by me, and which I have placed under the heading of Colchicina, is identical with the *colchicine* of Oberlin, but as I shall have by and by to treat of the physiological effects of the product obtained by Geiger, it will be better to speak of all under the one heading. It is not properly a salt, or if so is a very feeble one, and in its chemical properties should more properly be considered a neutral principle. It is very slightly soluble in cold water, to which it communicates a bitterness. It is more soluble in boiling water, which is rendered very bitter, but a precipitate takes place as the water cools. It is soluble in alcohol, ether, chloroform, and wood spirits, in all of which its taste is intensely bitter. It crystallizes in iridescent, pearly lamellæ. It is soluble in ammonia, caustic potash, and soda. It is not deliquescent in the air, and whether in the state of amorphous precipitate, or lamellæ, it remains unaltered. Oberlin found that the alcoholic solution was colored by the addition of bichloride of platinum, but that no precipitate was formed. Pure nitric acid dissolves it, and it acquires a very intense yellow color, which passes to violet, then deep red, and bright red, and returns to its original yellow color. He found also that concentrated sulphuric acid dissolved it, forming a solution of very intense yellow color, which it retained even after dilution with water. Hydrochloric acid dissolves it also with a bright yellow color. Acetic acid dissolves it, without alteration of color. He found also that it acquired a green color with perchloride of iron; but presented no change of color or turbidity with solutions of acetate of lead, nitrate of silver, perchloride of mercury, or infusion of galls.

Oberlin found its composition to be C 62·83, H 6·60, N 4·19, O 26·38. Pellatier considered this substance to be identical with veratria; but, independent of the many chemical tests, it may be distinguished from that alkaloid by the following properties:—A very small quantity of veratria causes intense sneezing, whereas colchicina produces no such effect. Colchicina is slightly soluble in water, to which it communicates a bitterness; it crystallizes also in pearly lamellæ; veratria has neither of these properties.

Physiological Action of Colchicina.—It is a very bitter and poisonous substance, even in very small doses inducing vomiting and purging. Geiger, who experimented with it on animals, found it to act as a violent drastic purge, causing convulsions and death from gastro-enteritis. One-tenth of a grain dissolved in weak spirits killed a young cat in about twelve hours: the symptoms were salivation, vomiting, diarrhœa, a staggering gait, cries, convulsions, and death; the stomach and intestines were violently inflamed, and had extravasated blood throughout the whole course.

Albers has also experimented with it on animals. He applied half a grain of the colchicin of Geiger under the skin of the thigh of a frog. After fifteen minutes the

breathing became laborious; after thirty-three minutes paralysis of the leg supervened, which in the course of an hour extended over the whole body, so that neither the skin nor the limb reacted on applying irritants; respiration ceased, but the heart continued to pulsate for nine hours longer. Repeated experiments gave similar results, and Albers concludes that:—1st, Colchicin acts specially upon the skin, considerably diminishing, and even entirely destroying its sensibility. 2d, Muscular activity is completely paralysed without preceding convulsions or spasmodic action. 3d, The heart does not share the paralysis of the voluntary muscles. 4th, The effects of colchicin appear only after a comparatively long time · the delayed effects of preparations of colchicum in diseases is hence explained.

Hoppe arrives, from his experiments on frogs, at the conclusion that colchicin first stimulates the activity of the heart, and that its after effects render it considerably weaker. That it first produces contraction of the bloodvessels, afterwards dilatation, and he thinks colchicin a special stimulant acting impulsively on the nerves of the vessels.

Aschoff observed the following effects from colchicin:—A pigeon, after one-quarter of a grain was administered, lost appetite, became drooping, had three evacuations, and died greatly emaciated on the ninth day Half a grain was given to a rabbit two months old: after six minutes it showed great uneasiness, quickened and laborious respiration, paralysis, spasms, and death in seven hours. A grown rabbit died after sixteen hours, from two grains; while another recovered in three days from the same dose, after suffering threatening symptoms. One grain applied into a cut in the leg of a dog three months old, produced restlessness, whining, mucous stools, diarrhœa, and death in sixteen hours. Two grains dissolved in half a drachm of alcohol were applied with friction to the region of the kidney of a dog two years old: disinclination to take food, pultaceous excrements, contraction of the abdomen, vomiting, restlessness, diarrhœa, towards the last mixed with blood, and death in five hours. A lamb ten days old died after six hours, with phenomena similar to those observed in the cases of dogs and rabbits. A cat died in twenty-six hours from one grain. In one case of a dog six months old poisoned by one grain, fifteen grains of tannic acid were of no antidotal effect. The animal died seven hours after taking the colchicin. In a case of poisoning of a cat by one grain and a half, chemical analysis proved colchicin to exist in the stomach, small intestines, heart, lungs, liver, kidneys, and blood. According to Aschoff's investigations colchicin is an acrid, narcotic poison, producing inflammation of the stomach and intestines, as proved on dissection, and causing death on reaching the circulation.

Gustavus Bley administered one-eighth grain of colchicin to a cat three months old; anxiety, restlessness, vomiting, and diarrhœic discharges followed, with spasms and death in six hours. Dissection showed inflammation of the œsophagus and stomach, and the heart was filled with black blood. To a grown rabbit were given two grains of colchicin in three divided doses; it passed considerable urine, lost all inclination for food, had very liquid discharges, vomited with much retching, and died in about seven hours. Dissection showed great congestion of the liver and kidneys, inflammation of the œsophagus and intestinal mucous membrane, black blood in the heart, yellowish liquid mucus in the stomach, and thin bloody excrement in the rectum. Three-quarters of a grain were administered to another grown rabbit, and two hours after fifteen grains of tannic acid in water; it was very restless, refused to take food, passed urine, and very thin alvine discharges. Soon after another dose of fifteen grains of tannic acid was given, and after six hours it again took food, and seemed after a few days to be recovered, but remained afraid of everybody. One grain introduced with a little water into the cellular tissue of a rabbit, killed it in an hour and a half. Dissection showed the intestines to be inflamed, liver and kidneys congested, dark blood in the heart, but the stomach and œsophagus healthy. Bley, like Aschoff, demonstrated the existence of colchicin in the organism after death, and thinks that tannin may be tried as an antidote against its powerful poisonous effects.

Schroff made physiological experiments with colchicin on men as well as on animals. In one case one centigramme was taken, and the following symptoms observed. Taste very unpleasantly bitter, followed by disagreeable eructations, nausea with strong inclination to vomit, and increased secretion of saliva; these symptoms continued for several hours: the frequency of the pulse was reduced during the first two hours by eleven beats. In the second experiment, on the same person eight days later, two centigrammes were administered in a wafer, thus avoiding the unpleasant taste. The same symptoms appeared during the first four hours as those previously noticed. Afterwards there was increased nausea, great anxiety, unpleasant sensations; sleep was troubled and restless; about midnight repeated diarrhœa, and vomiting took place, which from time to time continued the next morning. Nausea, entire want of appetite, unpleasant sensations, and great tenderness in the abdomen, continued for four days. The stools were yellowish green, mucoid, and there was much tenesmus. A feverish condition was induced with chills, and succeeding heat, thirst, quickened pulse, headache, restlessness, and sleeplessness. The urine was like whey, with abundant white sediment. Not until the fifth day did these abnormal symptoms pass off.

Rabbits died in from nine to fourteen hours, irrespective of the dose. One decigramme (about a grain and a half) was the smallest dose, it killed within fourteen hours; and one gramme (about fifteen and a half grains) was the maximum dose administered, which killed in eleven hours. In general very violent purging followed a few hours after administration, and the animals died gradually exhausted, somewhat like death from aconite. In exceptional cases—most frequently when no diarrhœa had taken place—convulsions immediately preceded death, otherwise, however much and in whatever way Schroff irritated the animals, and acted on their organs of sense, no reflex spasms appeared. Most constantly enteritis was found, sometimes gastritis, and always thick, pitchy black blood filled the cavities of the left heart, and the ascending and descending aorta to the branches belonging to the brain, liver, and kidneys. Comparing the effects of colchicin with those of veratria, Schroff refers to the fact, that the former does not excite sneezing when applied to the nose, violent burning and pricking pain when applied to the skin, great irritation of the mucous membrane of the mouth, and intense salivation, all of which veratria does. Colchicin, it is true, induces vomiting, but only after considerable time, while veratria does so quickly. Colchicin almost constantly causes gastro-enteritis, which veratria does not. But the most essential difference consists in the absence of any special relation of colchicin to the spinal marrow; reflex spasms never appear, which do take place in so marked a manner after the administration of veratria. A striking difference between colchicin and all narcotics is the fact, that the increase of the dose of the poison has comparatively almost no influence on the hastening of death. Colchicin possesses, therefore, only the properties of an acrid poison, without any special action on the brain or spinal marrow.

(To be Continued.)

M. Prévault of Tours speaks thus of his personal experience of the antiphlogistic *method*:—"When eighteen years old, and a student at Paris, I was seized with an attack of acute rheumatism, and carried to La Charité, to M. Bouillaud's wards. Seven bleedings from the arm in four days, eighteen cuppings at the knees, *diète absolue* for a week, mercurial frictions, blisters, were the treatment. However, the fever did not cease before the eighteenth day. At the end of a month, I left the hospital, and managed to reach my lodgings, which I could not leave again for a month; and I was a year before I was free from pain and stiffness in the joints."—*Brit. Med. Jour.*

Original Communications.

A SINGULAR CASE OF HEMIOPIA,

WITH REMARKS.

By CHARLES A. LEE, A.M., M.D.,

PROF. OF MATERIA MEDICA.

Two years ago last July Miss T——, æt. 16, attending a boarding-school, was instantaneously attacked with hemiopia while reading an essay before the school. Her face was observed to flush very much while reading, and the accident was at once discovered. I was requested to see her not long afterwards, and found her laboring under partial blindness of the right eye, obscuring one half the field of vision. Closing the left eye and looking directly forward, she could see just one half of any object, if presented immediately before the eye, viz. *the upper; the lower half being totally invisible.* The treatment, which was generally alterative, locally depletant, and revulsive, and continued for several weeks, produced no change whatever, and the vision is now as imperfect as the day the accident happened.

I believe that temporary hemiopia, affecting the right or left half of all objects, is not very unusual, as I have myself been thus affected at times, and known many others also similarly attacked. Sometimes it has been confined to one eye, but quite as often attacks both. But in all these cases the affection has been but temporary, passing off in the course of a few minutes, or hours, at furthest. The celebrated Dr. Wollaston was repeatedly attacked with hemiopia, as related by himself, in the Philosophical Transactions for 1824 (part i. p. 229), and he made the disease the basis of a theory regarding the "*Semi-decussation of the Optic Nerves*," published in the same paper. As his case is an extremely interesting one, especially in connexion with the morbid appearances of his brain, as disclosed at the autopsy (*Lond. Med. Gazette*, vol. iii. p. 293: Lond. 1829), no apology will be needed for quoting it at length, as well as two other cases which he has related:—

"It is now more than twenty years," says he, "since I was first attacked with the peculiar state of vision to which I allude, in consequence of violent exercise I had taken for two or three hours before. I suddenly found that I could see but half the face of a man whom I met; and it was the same with respect to every object I looked at. In attempting to read the name JOHNSON over the door, I saw only SON; the commencement of the name being wholly obliterated to my view. In this instance the loss of sight was towards my left, and was the same whether I looked with the right eye or the left. This blindness was not so complete as to amount to absolute blackness, but was a shaded darkness without definite outline. The complaint was of short duration, and in about a quarter of an hour might be said to be wholly gone, having receded with a gradual motion from the centre of vision obliquely upwards towards the left. Since this defect arose from over-fatigue, a cause common to many other affections, I saw no reason to apprehend any return of it, and it passed away without any need of remedy, without any further explanation, and without my drawing any useful inference from it. It is now about fifteen months since a similar affection occurred again to myself, without my being able to assign any cause whatever, or to connect it with any previous or subsequent indisposition. The blindness was first observed, as before, in looking at the face of a person I met, whose *left eye* was to my sight obliterated. My blindness was in this instance the reverse of the former, being to *my right*, instead of the left, of the spot to which my eyes were directed; so that I have no reason to suppose it in any manner connected with the former affection. The new *punctum cæcum* was situated alike in both eyes, and at an angle of about three degrees from the centre; for when any object was viewed at the distance of about five yards, the point not seen was about ten inches distant from the point actually looked at. On this occasion the affection, after having lasted with little alteration for about twenty minutes, was removed suddenly and entirely by the excitement of agreeable news respecting the safe arrival of a friend from a very hazardous enterprise."

We are not informed whether Dr. W. ever had any subsequent attacks of hemiopia, but he died about four years after this account was written, and it is stated that the *right optic thalamus* was of an unusually large size, and that on making a section of it, with the exception of a layer of medullary substance on its upper part, little or no vestige of its natural substance was perceptible. It had been converted into a tumor as large as a middle-sized hen's egg, of a greyish color towards the circumference, and harder than the brain itself, somewhat of a curious consistence, but in the centre of a brown color, soft, and in a half-dissolved state. This diseased structure was not confined to the thalamus, but extended to the neighboring portion of the corpus striatum. The right optic nerve, where it passes on the outside of the thalamus, was of a brown color, more expanded, and softer than natural. (See *Loc. Cit.*, p. 293.) Whether any connexion existed between this pathological condition of the brain and the previous affection of the sight, cannot be determined with any certainty, although it is certain that "morbid alterations in the substance of the brain sometimes produce periodic diseases; and that certain additional causes of excitement operating upon an unsound brain will cause one or other of the functions of that organ to be for a time impeded, till the new cause ceases to operate, when the individual immediately returns to his former state of apparent health."

Dr. Wollaston has related, in connexion with his own case, two other instances of the affection in persons of his acquaintance, which are perhaps worth quoting. In one, a gentleman, after suffering severe pain in his head for some days, about the left temple, and towards the back of the left eye, his vision became considerably impaired, attended with other symptoms, indicating a slight compression on the brain. Dr. W. saw him, at the end of three or four weeks, and found him laboring under hemiopia, which became permanent. In this case the blindness was in reference to objects situated to the right of the centre of view. "Fortunately," says Dr. W., "the field of his vision is sufficient for writing perfectly. He sees what he writes, and the pen with which he writes, but not the hand that moves the pen. This affection is the same in both eyes, and consists in an insensibility of the retina on the left side of each eye. *It seems most probable that some effusion took place at the time of the original pain on that side of the head*, and has left a permanent compression on the left thalamus.* This partial blindness has now lasted so long without sensible amendment as to make it very doubtful when my friend may recover the complete perception of objects on that side of him."

In another case, related by Dr. W., a person had been habitually subject to the affection for sixteen or seventeen years, *whenever his stomach was in any considerable degree deranged*. Here the blindness was invariably to the *right* of the centre of vision, affecting both eyes alike, and lasting about a quarter of an hour after eating, when laboring under indigestion, and then subsiding without leaving any permanent imperfection of sight. The pathology of this affection, as suggested by Wollaston, is highly rational and ingenious, if not wholly sound in detail. He assumes that, as the corresponding points of the two eyes sympathize in disease, their sympathy must arise from structure, and not from a "mere habit of feeling together;" that two corresponding points must be supplied with a pair of filaments from the same nerve, and the seat of a disease in which similar parts of both eyes are affected must be

* Dr. Wollaston was under the impression that the optic nerves took their rise from the *thalami nervorum opticorum*; whereas it is now well known that they have their origin in the *corpora quadrigemina*, the optic lobes, tubercles, or ganglia.

considered as situated at a distance from the eyes, at some place in the course of the nerves where these filaments are still united. Hence, he inferred that the cord, which is called *optic nerve*, must be regarded as consisting of two portions, one of which comes from the right, and the other from the left thalamus: decussation thus taking place only between the adjacent halves of the two nerves: that portion proceeding from the right thalamus to the right side of the right eye, passing to its destination without interference; and in a similar manner the left thalamus supplying the left side of the left eye with one part of its fibres, while the remaining halves of both nerves, in passing over to the eyes of the opposite sides, intersect each other, either with or without intermixture of their fibres. It follows that an injury to the *left* thalamus would occasion blindness to all objects situated to our *right*, owing to insensibility of the left half of the retina of both eyes, and *vice versâ*. But how is it, when, as in the case I have given, the *upper* or *lower half* of the field of vision is obscured, causing horizontal hemiopia? Is there any evidence that the two portions, of which each optic nerve may be regarded as consisting, remain distinct after they form the retina? Do not pathological facts, and anatomical and physiological experiments, show that diseases and injuries affecting one side of the brain produce amaurosis only in the opposite eye, instead of hemiopia in both eyes? Mackenzie has called attention to the fact that, as the optic nerves pass through the sclerotica and choroid, considerably nearer the middle line of the body than the centre of the globe of each eye, the two optic axes, which, if any two points deserve to be considered as such, are surely corresponding points, will not be formed by filaments from the same nerve, but from opposite nerves; and he thinks it more probable that the two portions, of which each optic nerve consists, mingle in the fibres, and then expand into the retina, so that the membrane in each eye should be regarded as a plexus, every point of which contains fibres derived from each side of the brain.

The best and most recent anatomical authorities represent the optic nerves as decussating with each other in such a manner as to form a connexion between the two opposite sides, as well as between each tubercle and retina of the same side. This is beautifully illustrated by a plate in Dalton's Physiology, where from each optic tubercle three different bundles or tracts of nervous fibres are seen given off; one set passing across transversely at the point of decussation, and turning backwards, terminates in the tubercle of the opposite side; another set, crossing diagonally, continues onward to the opposite eyeball; while a third passes directly forward to the eyeball of the same side; a fourth set of fibres, still, passes across, in point of the decussation, from the retina of one side to that of the opposite side. By this arrangement, then, we have the two retinæ, as well as the two optic tubercles, connected with each other by commissural fibres; while each tubercle is, at the same time, connected both with its own retina and with that of the opposite side. It is doubtless owing to these connexions, and this arrangement, that when, in the human subject, the eyes are directed in their proper axes, the two retinæ, as well as the two optic tubercles, act as a single organ, and that vision is single, though there are images upon the retinæ; double vision only occurring when the eyeballs are turned out of their proper direction, so that the parallelism of their axes is lost, and the image no longer falls on corresponding parts of the two retinæ; or in other words, the fibres which proceed from the optic ganglia to the retinæ, constituting the proper optic nerves, being composed of an external and an internal tract—the *external* on each side pass directly onwards to the eye of that *side*, whilst the *internal* crosses over to the eye of the *opposite* side; the distribution of the two sets of fibres in the retina of each eye respectively being such, that the fibres from either optic ganglion will be distributed to its own *side of both eyes*—the right optic ganglion being thus exclusively connected with the outer part of the retina of the right eye, and with the inner part of the retina of the left eye, and the left optic ganglion being, in like manner, connected exclusively with the outer side of the left retina, and with the inner side of the right. Of course, as either side of the eye receives the images of objects which are on the other side of its axis, it follows that in the human subject, as well as some of the lower animals, each ganglion receives the sensations of objects situated on the opposite sides of the body. It has been suggested that the purpose of this decussation may be, to bring the visual impressions, which are so important in directing the movements of the body, into proper harmony with the motor apparatus; so that, the decussation of the motor fibres in the pyramids being accompanied by a decussation of the optic nerves, the same effect is produced as if neither decussated, as is the case with invertebrated animals in general.* In fishes, for example, as is well known, the optic nerves cross each other at the base of the brain, without any intermixture of their fibres; that from the right optic tubercle passing to the left eye, and that from the left optic tubercle passing to the right eye; the two nervous cords being totally distinct from each other throughout their entire length, being only connected at the point of crossing, by intervening areolar tissue. Of course, impressions made on the right eye must be perceived on the left side of the brain, while those which enter the left eye are conveyed to the right side of the brain. In birds, also, although the optic nerves are here united, and apparently soldered together at their point of crossing, yet the decussation of their fibres is nevertheless complete; the nervous filaments coming from the left side passing altogether over to the right, and those coming from the right side passing over to the left. Accordingly, if one of the optic tubercles be destroyed in a bird, complete blindness is at once produced in the eye of the opposite side; but vision remains unimpaired in the eye of the same side with the injury. The true explanation of the phenomena of hemiopia must, then, be found in the anatomical arrangement of the fibres entering into the structure of the optic nerves. Mackenzie very truly states, that if a tumor or excrescence were to press on the optic nerves immediately anteriorly to their union, the effect would be, according to the hypothesis of semi-decussation, to paralyse the inner half only of each retina. If, however, pressure were made on that portion of either optic tubercle whence those fibres originate which pass across transversely at the point of decussation, and turning backwards terminate in the tubercle of the opposite side; or if the effusion be located at that point whence the fibres originate, which, crossing diagonally, pass onward to the opposite eyeball; or at that part whence the fibres proceed directly forward to the eyeball of the same side, without any decussation whatever; or, as in the case already supposed, where pressure is made on those fibres which pass directly across in front of the decussation, from the retina of one eye to that of the opposite side, causing in this case paralysis of the inner half only of each retina; in each of the above pathological conditions supposed the phenomena will be varied according to the precise point on which the pressure is made. It would seem that the same effects would follow whichever tubercle, the right or left, was the seat of the pressure; but whether the right or left side of the retina, its upper or its lower portion, be paralysed, must depend,

* Carpenter has remarked (*Prin. of Hum. Phys.*, p. 717) that the singleness of the impression resulting from the formation of two pictures upon our retinæ is not attributable to the anatomical arrangement above pointed out; but that their combination is a *mental process*, and "the fusion of two *dissimilar* pictures is necessary to enable us to exercise one of the highest attributes of the visual sense, the perception of *projection*." If this be so, why is *perfect vision* possible with one eye; and why, when, by the pressure of the finger, or otherwise, we compel the image to fall in one of the eyes upon another, and, therefore, not-symmetrical point, the object at once becomes double? The fact is, that each point of the outer portion of the retina of the right eye has its point of symmetry in an inner portion of the left, and when from any object rays fall on those symmetrical points that object will be seen single; if not, double. This exchange of symmetry, of course, concerns only the *lateral divisions*, for the upper portion of one eye corresponds with the upper portion of the other, and the lower with the lower.

of course, on the particular portion of the optic tubercle on which the pressure is exerted, or which becomes the seat of disease. When the hemiopia is seated in one eye only, we infer that that portion of the tubercle is affected, or the seat of pressure, whence those nervous fibres originate, which do not decussate, but pass directly forward to the eyeball of the same side. We thus, I think, have an anatomical explanation of the phenomena of hemiopia, which is entirely rational, and consistent with all that is yet known of cerebral pathology. In the case I have detailed it is undoubtedly very remarkable that the slight cerebral excitement, manifested by a temporary blush on the cheeks, should have resulted in a partial horizontal blindness of one eye, and that it should have continued unchanged for more than two years; showing either that absorption of the effused blood has not taken place, or, if it has, that the function of a portion of the nervous fibres has been lost by disuse, or disorganization, the result of long continued pressure: and those cases of functional or sympathetic hemiopia caused by indigestion, and lasting but a short time, are equally curious and remarkable. In these cases, so far as we have observed, the affection involves both eyes, but where it is owing to a permanent organic cause, as a clot, or pressure from effusion, it may be confined to one eye. The organic cause may be seated either, first, in the *retina itself*, which is liable to inflammation and congestion and their usual results, its functions being subject also to a partial or complete extinction, without itself evincing any change of structure, its sensibility alone being impaired or abolished; or second, in the *optic ganglia*, whence the optic nerves originate; or third, in the *optic nerves* themselves, in some part of their course, from the anterior part of the quadrigeminal bodies, along the thalami and the tubera cinerea, to the retinal expansion. The functional derangement of vision from worms in digestion, etc., may be accounted for, from the connexion of the retina with the par vagum, sympathetic, and other nerves. For example, branches from the great sympathetic may be traced upwards, from the first cervical ganglion, to the ganglion lodged in the cavernous sinus; whence branches proceed and communicate with the third, the first division of the fifth and sixth pairs of nerves; while branches pass from the cavernous ganglion directly to the lenticular ganglion; besides, as the internal carotid artery passes into the cranium, it is surrounded by the sympathetic nerves, which accompany all its ramifications, including the ophthalmic artery, and its branches to the choroid, iris, and retina; branches also of nerves proceed from the lenticular ganglion to the iris, giving off minute twigs in their course to the retina. Morbid states, then, of these nerves, or irritation of their expanded extremities on the gastro-intestinal membrane, may be reflected upon the optic nerves, or the retina, or iris, and derangement of vision follows.

After what has been stated it is unnecessary to speak of the predisposing or exciting causes of hemiopia, whether functional or organic, as they are sufficiently obvious. Nor need the principles of treatment be dwelt upon, as they are equally evident.

PEEKSKILL, 1862.

ENORMOUS SACCULATION OF THE BLADDER.

By Wm. WARREN GREENE, M.D.,
GRAY, MAINE.

I was called, Dec. 1st, 1861, to see Moses Burnett of New Gloucester, aged eighty-four years, who gave me the following history:—For six or seven years he had suffered from dysuria, being always obliged to strain a good while before passing his water. Three years ago last March he slipped upon the ice, and fell, striking directly upon the ischiatic tuberosities, at which time he "felt something give way" in the abdomen. Ever since this he has suffered more or less from pain and soreness in that region, and from an unnatural fulness of the bowels, which he first noticed a few weeks subsequent to the fall, and which steadily increased. He did not remember the exact point at which the increased fulness first showed itself. The difficulty of micturition had been greater since the fall, and he could pass only a tablespoonful at a time. He had never been subjected to catheterism, and during a treatment of several months subsequent to the fall he was unable to realize any benefit from medicine. His family physician, Dr. Farnham, of New Gloucester, not being present, I had no benefit from his previous knowledge of the case, although the patient informed me that the diagnosis was "hydatids of the liver;" this opinion Dr. F. subsequently reported to me. Mr. B. was suffering especially at this time from severe epigastric pain and pressure, and it was for the relief of this that he consulted me.

Upon examination of the abdomen I found marked enlargement, but not by any means in a degree commensurate with the extreme tension upon palpation, and dulness upon percussion, which existed over the whole surface. Slight tympanitis at some points along the track of the colon was the only exception to perfect flatness on percussion. The parts did not present that regularity of outline which obtains in ascites, but curving upwards and to the right from near the symphysis pubis, and losing itself about midway between the umbilicus and the superior spinous process of the right ilium, was a well marked linear depression, into which the fingers could be laid. Above, and to the left of this, the abdominal surface was regularly protuberant, and fluctuated distinctly upon palpation. Below this depressed line, *i. e.* in the right iliac fossa, was a marked prominence, fluctuating distinctly, and quite tender on pressure. This was the only tender point upon the whole surface. At this point, too, the distance between the finger and liquid seemed less than elsewhere. There was no œdema, and the skin was everywhere movable over the tumor. By careful and repeated percussion I satisfied myself that there was a communication between the two portions of fluid on either side of the curved line referred to, but evidently not very free. An examination *per rectum* revealed great tenderness and enlargement of the prostate gland. I introduced a medium-sized catheter into the bladder with but little difficulty, and drew off perhaps a teaspoonful of healthy urine, and no more. I say the catheter passed *into* the bladder, but just as it apparently made its entrance it met with some firm obstruction. By turning the beak a little to the left (the patient's right) it passed a trifle further, but no more urine was obtained, the tenderness of the parts rendering any manipulation extremely painful; and the patient being so aged and feeble, I did not deem it proper to sound the parts as thoroughly as I should have done under different circumstances.

My diagnosis, as expressed to the friends, and Dr. Kilgone, of Windham, who incidentally saw the case with me, was encysted liquid, with partial bi-section of sac: but what was the exact nature or origin of sac or contents, I could not decide satisfactorily to myself. From the results of catheterism I inferred that the cavity of the bladder was nearly obliterated by external pressure from the morbid growth.

Telling the friends that nothing beyond palliation by anodynes could be done, that "tapping," which had been proposed and urged by members of the family, was not warrantable, I left the patient with the promise from the family of an opportunity of completing my diagnosis upon the cadaver, when death, which was evidently near at hand, should occur.

Dr. K., while he waived giving any opinion, agreed with me in the propriety of non-interference by operative procedure.

Death occurred Dec. 11th, thirty-six hours subsequent to which I made the autopsy, Dr. Farnham, of New Gloucester, present, and assisting. Dr. F. told me that he saw Mr. B. four days previous to death, and finding he had not urinated for thirty-six hours passed the catheter as far as possible into the bladder, "a very small amount" of urine

passing, after which any attempt to pass it further caused great pain, and considerable hæmorrhage. From that time to his decease no urine was passed.

On uncovering the body I noticed that there was some dribbling of urine from the penis, and that enough had escaped to saturate the clothes upon the parts. Also the abdominal tension seemed correspondingly lessened. Pressure upon the *right* hypogastrium increased the flow, while pressure upon the *left* corresponding region *completely arrested it.* I now passed a small-sized sound into the bladder, and found the same difficulty as in life; but by carefully deflecting the beak towards the right iliac fossa, with a little manipulation I succeeded, as ascertained by the finger on the surface, in passing it onward, and bringing it up to the point spoken of as being prominent, tender, and fluctuating. I now withdrew it, and directing Dr. F. to make firm pressure with the hand upon the *left* hypogastrium, I again introduced the instrument, and found it impossible to carry it by the point of obstruction with any moderate force, *till the pressure was removed.* I was, during this operation, careful to prevent the escape of urine, as also through the subsequent steps of the examination.

The abdominal walls were opened by a crucial incision, and reflected from the surface of the sac. This was accomplished with some difficulty, as numerous and firm adhesions existed between the peritoneum and cystic walls. Upon making a small incision into that portion of the sac below and to the right of the curved, depressed line, I found it to be the urinary bladder hypertrophied, and the curved depression the boundary between it, and an immense diverticulum, which completely filled the rest of the abdomen; crowding the line and stomach completely out of sight. This sac contained almost a gallon of limpid urine, by measurement, and I have since ascertained by careful experiment—I have the specimen in my possession—that it will hold a little more than a gallon. The hypertrophy of the bladder is confined principally to the posterior wall, the maximum thickness of which is one inch and a quarter, the internal surface resembling the columnæ carneæ of the heart. The communication with the divertieulum is by an opening upon the left side, four inches from the neck, about one inch and a half in diameter, having a regular outline, and smooth edges. The walls of the pouch are made up of a prolongation of the mucous and peritoneal tunics of the bladder, the muscular coat being wanting. The prostate gland is as large as a medium-sized orange.

The history of the case, both *ante-* and *post-mortem*, suggests the following explanation of the origin of the sacculation, and the symptoms to which it gave rise, viz. that the primary dysuria was caused by an enlarged prostate gland, combined, perhaps, with partial paralysis of the muscular coat of the bladder; that when he fell the bladder was distended with urine, and that by counter-stroke a breach occurred in the muscular wall of the bladder, allowing a small pouch of the mucous lining to protrude, the size of which sac would be constantly increasing under the accumulation of urine, and the violent expulsive efforts at micturition, which, weakened by the very condition they were increasing, were expended with very nearly the same force upon this point as upon the urethral orifice, and after reaching a certain size it made room for its further increase by carrying the bladder outward into the right iliac fossa; and, furthermore, after filling the whole abdominal cavity, crowding all its viscera into the concavity of the diaphragm, as fluids press in all directions alike, a certain amount of pressure was thrown upon the *left side of the bladder, below the points du départ* of the sac, thus forcing the vesical wall at this point down upon the vesico-urethral opening like a valve. And here, in confirmation of this explanation, I will state what I omitted in its proper place, that at the examination Dr. Farnham called my attention to an ecchymosed condition of the mucous membrane at this point, which was no doubt caused by the point of the catheter during life. Thus we have a clear explanation of the difficulty of catheterism, and although, in the light of an autopsy, the case appears beautifully simple, yet I confess I do not see any possibility of establishing an accurate *positive* diagnosis in life; impossible as it was to sound the bladder, at least with any safety to the patient.

It is easy to conceive that, had this case occurred in a patient more youthful, or rather less aged and more vigorous, it might have afforded a painful paragraph in the literature of operative surgery.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, February 12, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

INFLUENCE OF CHRONIC PLEURISY ON THE DEVELOPMENT OF PHTHISIS; PNEUMO-HYDRO-THORAX; PERICARDITIS.

DR. AUSTIN FLINT presented a specimen of a heart, and remarked upon it as follows:—The patient from whom the specimen was removed I saw for the first time in Bellevue Hospital, the early part of September last. He gave then this history:—He had had cough, with some expectoration, for ten months, and during this time had had one or more attacks of hemoptysis. He, however, continued his work as a laborer, and while engaged in rolling a barrel, some three or four weeks before his entrance, he felt suddenly an acute pain in the left side, as if something had given way; His pain continued; there was dyspnœa on attempting to exercise, and he took to his bed for three days, then arose, and was able, with some difficulty in his breathing, to get about. When I saw him in September, he did not present a particularly morbid aspect, and was able to walk about with much difficulty. The left side of the chest was found to be dilated, and comparatively motionless on respiration, giving at its superior portion some tympanitic resonance, with flatness at the base. The heart was crowded to the right side, and succussion could be easily produced, making it evident that pneumo-hydro-thorax existed. On resuming my attendance, Dec. 1, not having seen the patient during October and November, I found him up, and able to take considerable exercise without much inconvenience. The left side of the chest was, however, still more dilated, yielding absolute flatness on percussion, with complete silence of all auscultatory signs. He remained in this condition for some time, but after a while the fluid began to accumulate, causing great distress in breathing. He was then very anxious to have the chest opened, but I objected to the operation, thinking that perhaps the removal of the liquid might lead to perforation of the lung, and renewal of the pleurisy. However, his sufferings increasing upon him so rapidly as to render his life in danger from suffocation, I consented to have the fluid drawn off. This was done by Dr. Sayre, in presence of the class. A free incision was made at the lateral and lower portion of the chest, giving exit to a large quantity of turbid liquid, which had a slightly fetid odor. The patient was very much relieved thereby, and for some time afterwards expressed himself as feeling very comfortable. On examination, however, the usual signs of perforation of the left lung were very evident; there being present amphoric voice, amphoric respiration, metallic tinkling, and tympanitic resonance. The opening, contrary to our intentions, closed, but soon after opened again, when sufficient fluid had accumulated. A constant discharge of fluid, similar in character to that already described, was kept up for two or three weeks, at the end of which time death took place by exhaustion.

I was not present at the autopsy, but perforation of the lung was shown to exist by inflation through the trachea with a bellows; air freely bubbled up through the liquid, in the chest. The left lung was very much compressed, and the right lung presented some emphysematous

lobules at its upper portion, and also some evidences of tuberculous deposit.

It was ascertained that the patient had had pericarditis. There was universal adhesion of the pericardial surface, though not very firm, except at one point, where there was quite an organized band. On the side where pneumo-hydro-thorax existed, at the summit of the lung, were a few old, small characteristic tuberculous excavations. In removing the lung a portion of the tissue of the organ in this situation was so fast adhered to the chest that it was left behind. Throughout all the other portions of the lung, there were no evidences of tubercle.

The points of interest in the case I suppose to be these:—In the first place, the occurrence of pneumo-hydro-thorax with pericarditis in a patient, who after a short time was able to take exercise without suffering. I think this is rare, although I have met with two or three cases somewhat similar. Another point in the case is the evident arrest of the tuberculous disease. There had evidently been, for some time before the death of the patient, and probably during the time he was affected with pneumo-hydro-thorax, no fresh deposit of tubercle. The tubercle that had been deposited at the apex had undergone its changes in the formation of cavities when the disease had undergone arrest. That fact is interesting to me in connexion with the impressions I have received, as the result of clinical observations, that the occurrence of chronic pleurisy in the course of tuberculous disease leads to the retardation of the latter affection.

Dr. Clark remarked, with reference to the last statement of Dr. Flint, that some fifteen or twenty years ago it was proposed to puncture the chest in cases of tuberculous disease of the lungs, and take the consequences in the hope of a cure by compression. He did not think that the treatment gained currency, although the practice was no doubt founded upon the same general observations as referred to by Dr. Flint. Dr. Clark had frequently noticed that the development of tuberculosis was retarded by compression of the lung.

VEGETATION ON MITRAL VALVE, HYPERTROPHY OF HEART, ETC.

Dr. Flint presented next a heart, taken from a female, æt. 35, who recently died in Bellevue Hospital. She entered the Institution on the 10th of December, had had rheumatism nine years before, had suffered many years from want of breath on exercise, and had finally been affected with general dropsy a few weeks before her admission. When I saw this patient, continued Dr. F., she had anasarca with liquid effusion in the cavities, was suffering with dyspnœa, presented lividity of the prolahia and face. On examining the chest there was an extremely loud systolic murmur heard with its maximum of intensity at the apex, and propagated to the left as far as the spinal column, and even to the right of it. This was the only murmur that could be discovered. The heart was evidently somewhat enlarged, the apex beating in the sixth intercostal space on a vertical line with the nipple. The aortic first sound was feeble, the aortic second being quite intense. This patient failed rapidly, the dyspnœa became more and more urgent, the anasarca more extreme, and she died with that slow lingering death from apnœa. The urine, which was examined while the patient was under my care, presented no evidences of albumen, although it was said to have contained it at a previous time.

The heart when removed weighed twelve and a half ounces. The right ventricle is dilated and hypertrophied, the walls being three-eighths of an inch in thickness. Both the auricles are largely dilated. The walls of the left ventricle are not increased in thickness, and its cavity is not much, if any, dilated. This condition is somewhat unusual with disease of the heart inducing general dropsy and death. There was free regurgitation through the mitral orifice, and the enlargement of the other portions of the heart, viz. the two auricles and the right ventricle, is perfectly consistent with that condition of things. The right cavities were filled simply with dark coagula, a fact which shows that the mere accumulation of blood in these cavities, the cause of death being paralysis, does not necessarily lead to the formation of ante-mortem clots. These latter in all probability depend as much upon the condition of the blood at the time as its mere stagnation.

The interesting point connected with this specimen is, not the contraction of the mitral orifice, which is common enough, but the presence of two vegetations of considerable size, one as large as a bean, the other somewhat smaller. The larger one is attached to the papillary muscle of the inferior curtain by what appears to be a small pedicle, which is a fractured extremity of one of the tendinous cords. The vegetation is produced, as I suppose, by the accretion of fibrine upon it. The other concretion is upon another tendinous cord which has not been fractured. These vegetations were so situated as to be pushed backwards and forwards by the direct and regurgitative currents, and being thus moved were very liable to be detached, and to have produced an embolus. It is easy to see if the vegetation had been found plugging up any of the arteries after death that the place of its original development could have been easily determined—especially if a portion of the tendinous cord were carried with it.

Dr. Clark asked if any of the tendinous cords were ulcerated, as it was rare that rupture occurred without such a pathological process pre-existing.

Dr. Flint had found no evidences of ulceration of the parts alluded to.

BRIGHT'S DISEASE SUCCEEDING DIABETES.

Dr. Alonzo Clark next exhibited a specimen of Bright's disease, and recited the following history of the case:—

A child ten years of age, was attacked with pneumonia a little more than a year ago. The disease ran its usual course, and the recovery was apparently complete. Two months after this it was noticed that the quantity of urine passed was very much greater than usual. The family physician, Dr. Linsley, had his attention called to this point, and very soon after asked me to see the girl with him. We examined her, and found that the quantity of urine passed during the day amounted to a gallon. Its specific gravity was 1036, and the quantity of sugar which it contained was very considerable; in other words, it was a case of diabetes. It went on as diabetes for several months, the quantity of water being diminished very much, and the quantity of sugar in it decreased while she was taking the alkalies pretty freely; and subsequently to that Champlin's cakes were recommended, this being while she was in the country during the summer. On the return to town in the autumn the mother had an objection to restraining the child to diet, and thinking it was hardly worth while to administer medicine, as it was an incurable disease, very little medicine was given. The physician at this time saw the child but little. During the latter part of its life she was allowed to eat cakes, candy, indeed almost everything. She retained her flesh very well. About a fortnight before her death it was noticed that she had a fever, and that the quantity of urine was diminished, and its color changed. I suppose it had lost the faint straw color that diabetic urine usually has. The mother stated that it was less watery, and that it bore a bead a long time after it had been passed. On a Saturday night the mother noticed that this fever was more intense than it had been at any time previously, the child being very restless. Dr. Linsley early in the morning following found the pulse 140, with a great deal of restlessness, and in the course of the day invited me to see the girl; an interval of eight or nine months had then elapsed since my last visit. We found the pulse still up to the high figure referred to, and the face, which was a few days before rosy, was then pale, the nervous restlessness had not abated, and she had severe pain in the left side and chest, giving rise to the suspicion of pleurisy, which, however, did not exist. There was also a great deal of pain in the stomach, a little vomiting and disposition to stupor, with a contracted con-

dition of the pupils. The thought struck us that there must have been some change in the phase of the principal disease. There was no pneumonia present, though there was discovered some dulness at the base of the left lung with crepitation. A small amount of œdema about the feet and legs was also noticcable. At our next visit during the afternoon of Sunday, the crepitation and dulness had all gone, yet pain still remained. The same mental condition continued, though there was less moaning. The respiration had become very remarkably embarrassed by laryngeal spasm. In the meantime I obtained the urine, which had become about one-third less than it had been during the diabetic stage of the disease. It was found, in addition to the sugar it contained, heavily charged with albumen, granular casts being also in abundance. The specific gravity was 1020. Death occurred on Monday night, having been comatose only about three hours.

A post-mortem examination was granted by the parents, and all the organs of the body liable to be in any manner connected with the disease were inspected, with the exeeption of the brain and spinal cord. The kidneys were about the size of those organs in the adult, and were of a pale hue. Microscopical examination proved the existence of fatty degeneration; none of the uriniferous tubes contained healthy epithelium, and most of the cells were loaded with fat. The intertubular tissue was in a state of granular and fatty degeneration; in a word, Bright's kidney existed, though not far advanced.

We were interested in the examination of the other organs. Not a tuberculous grain could be found in one lung, and none could be felt in the other. The post-mortem examination also showed that the dulness and crepitation that were noticed at the base of left lung at the first visit on Sunday had left no mark; no pneumonia; no pleurisy; no abscess. The pain was doubtless due to a hyperæsthesia over the whole chest.

The liver we examined, and I reserved a small piece of it for microscopic inspection. There were two bands upon the surface, which gave unmistakable signs of fatty degeneration, but taking a portion which exhibited no particular marks, and examining it microscopically, I found it in a condition very similar to that described in the kidney. The cells were almost all of them fatty, and there was a certain amount of granular exudation in the tissues; whether this condition belonged to the diabetes or not I am unable to say. The liver was large for a child of her age.

The heart was about natural in size, and I was interested to know in connexion with this disposition to fatty disease in the kidneys and liver that there was some atheroma in the arteries, and that in the mitral valves were two spots of considerable size in which the atheromatous deposit was quite marked. These are the prominent features in a case which has interested me as the first one in which I have known of diabetes being converted into, or replaced by, Bright's disease.

I have no doubt that the child died of uræmia, but here was still sugar in the urine and the quantity of that secretion was large.

Dr. Bibbins remarked that, being a friend to the family, he had seen the child but a few days before death, and was much surprised, considering the beautiful color of the cheek, to learn that it had Bright's disease.

VALUE OF BRONZE SKIN IN DISEASE OF SUPRA-RENAL CAPSULES.

Dr. Clark presented a pair of kidneys, with suprarenal capsules attached, which had been sent him by Dr. Hogan of the New York Hospital. He had no detailed account of the case to give, it was sufficient to refer to a single point in that connexion:—A person was admitted into the New York Hospital with grave symptoms, and seen by Drs. Bulkley and Cock, was, on account of the bronzed discoloration of the skin, pronounced to have the mark indicated by Dr. Addison as attending disease of the supra-renal capsules. These organs, on post-mortem examination, were found healthy. This was among the many instances of exception to the rule laid down by Addison.

Dr. Flint had met with a case in the New Orleans Charity Hospital, of marked bronzing of the whole cutaneous surface associated with idiopathic anemia. The supra-renal capsules, however, were found after death perfectly healthy.

SCROFULOUS DISEASE OF THE EPIDIDYMIS.

Dr. Finnell exhibited a pair of testicles removed from a shoemaker, sixty-two years of age. About two years ago, when first seen by Dr. Finnell, he complained of pain and distress in both testicles to that degree as to prevent him from following his vocation. The pain was for the most part in the situation of each epididymis, and would not unfrequently shoot up the cord and occasion a good deal of distress in the lumbar region. On examination the testicles proved to be very little increased in size, but each epididymis presented a firm cartilaginous feel. Small doses of iod. pot. were prescribed, with an occasional anodyne, and relief from pain was afforded for a few months, when a small sinus formed on one testicle, to be shortly after followed by one on the opposite organ. Both discharged a small quantity of ill-conditioned pus. Becoming much annoyed by the pain and the discharge he desired relief by eastration, and for the purpose of having the operation performed entered St. Vinceut's Hospital. A consultation was held, and it was deemed unadvisable to interfere with the knife, but belladonna was prescribed internally and locally. His condition improved, and when he left the institution one of the sinuses had healed, and the diseased parts did not seem to have enlarged. During his stay, however, he was subject to frequent and imperfect micturition. No stricture of the urethra was discovered. He shortly after returned with an attack of acute pneumonia, of which he died.

On post-mortem examination both testicles were found healthy, but throughout the whole extent of each epididymis tuberculous matter was deposited; and in one of the organs a small cavity was found.

The society then adjourned.

Clinical Instruction in San Francisco.—The students of the Medical Department of the University of the Pacific will, in future, enjoy the benefits of clinical instruction to the fullest extent. The City and County Hospital, constantly filled with interesting cases, composing nearly every form of disease to which our coast is subject, is now open to them. The St. Mary's Hospital, under the supervision of the ever zealous and self-sacrificing Sisters of Charity, which bids fair to be one of the noblest and most prosperous institutions for the sick, will, as we are assured by one of the attending physicians, admit the class during the last half of the present session, and, after that time, continuously during future sessions. These, associated with the surgical clinics of the Pacific Clinical Infirmary, constitute an amount of bedside instruction seldom offered to medical students.—*San Francisco Med. Press.*

Twenty-third Annual Report of Board of Trustees and Officers of the Central Ohio Lunatic Asylum for the Year 1861.—This Institution, as our readers are aware, is located at Columbus, O.; Dr. R. Hills, Superintendent. The daily average number of inmates during the year was 262; the whole number under treatment was 421. The whole number discharged recovered was 107; improved, 14; unimproved, 33; died, 15. The whole number admitted from the opening of the institution until the end of the last year, a period of twenty-three years, 3857. The percentage of recoveries on all these is 51.87; on all cases recent when received, 71.32; on all cases chronic when received, 24.30. Thus it will be perceived that the chances of a cure are much increased when treatment commences when the case is recent During the period of twenty-three years, of the whole number admitted, the disease was hereditary in 752 cases; periodical in 348; suicidal in 456; homicidal in 189.—*Cin. Med. and Surg. News.*

American Medical Times.

SATURDAY, MARCH 29, 1862.

PRACTICAL REMARKS ON THE MEASURES OF REFORM IN THE MEDICAL DEPARTMENT OF THE ARMY.

In looking over the discussions upon the several medical reform bills presented in Congress, we have been deeply impressed with the fact, that the leading minds of both Houses are anxious to do full justice to the regular Staff, and to give full credit for the meritorious services of our medical brethren of the Army, both regular and volunteer; but that, unless our Congressmen are met and guided by liberalized and enlightened suggestions from the regular Staff, the honor and welfare of that Staff, and the highest interests of the Army, are likely to suffer at the hands of an impetuous and patriotic majority that feel bound to take summary measures, if need be, to secure more effectual and prompt protection to the life and health of the people's Army. The claims of the regular Staff have been ably defended by leading Senators, and whenever that Staff expresses its approval of any adequate plan to meet the existing emergencies of the Army, it will be found that the sentiments that were so nobly expressed by those Senators will prevail. Said Hon. Mr. Rice:—

"We have a contract with the officers of the Army. When the Surgeons, Assistant-Surgeons, and all the officers of the medical corps came into the service, they abandoned all the civil pursuits of life, and came in under an implied contract that they should be benefited by promotions, etc." * * * These are new offices, I know; but we have no right, morally, to go into civil life to select gentlemen, or place them above officers with whom we have made a contract. * * * It is an innovation that has never been made in the Army, and I hope the door will not be opened now. I venture to say, that the *best* medical officers in the volunteer service would not accept these positions."

It is understood that the Sanitary Commission originally suggested the plan for the institution of the proposed new branch in the Army Medical Department, to be specially devoted to administrative and sanitary duties; and, as we have been informed, that Commission is unanimously in favor of having the chief officers of that branch, as named in the Bill, selected and appointed from the regular Staff. But, of course, in carrying out any effective plans for the better sanitary surveillance of camps and hospitals throughout the volunteer army, all the brigade and division surgeons of that army would necessarily become co-ordinate and co-operative with the new administrative branch of the regular medical department. And without the institution of such a branch, devoted to systematic sanitary inspections and administrative improvements, the brigade, as well as regimental surgeons of volunteers, will measurably fail even in their best efforts to meet the obligations they have assumed. As to the propriety and importance of having that branch of the service directed by officers of the regular Staff, who are experienced in military life, we do not think the point admits of a question. But the time is at hand when something must be effectually, if not most wisely, done to meet the exigencies of our rapidly advancing army; and if our brethren in the regular Staff do not devise some practical plans that shall be accepted by Congress, the direction of affairs in the medical department will be likely to fall into the hands of unworthy aspirants, to whom Senators Hale, Foster, and Fessenden would widely open the door. In the progress of the first Medical Bill through the Senate those gentlemen had it their own way. Said Senator Fessenden:—

"If you want good officers enlarge your circle. If you want the best men you can get—and you do want them—do not confine the selection to a little knot of men, but enlarge it, throw it open to the distinguished gentlemen who have volunteered and are in the service, and are competent to render the very best service in the line of their profession."

This kind of argument accomplished its purpose, and the Bill was amended accordingly. But, as we stated last week, the Military Committee of the House has been more conservative, and now the Staff may give success to the right measures. We pray the resident members of the Staff at Washington to make no delay in this matter, for unless they now show their hand, the popular cry of reform and change will break down all the safeguards of the Staff and the Medical Department. Some of the unhappy results that must follow the overthrow of the Staff are foreshadowed in the following remarks of the President's intimate friend, Senator Browning:—

"The only applicants that there will be from the volunteer service for promotion, and for the chief positions in this corps, will be the class characterized by the Senator from Minnesota, and the Senator from Oregon, as medical and political quacks; and *it will subject the President to a degree of harassment and vexation that I am not willing to impose upon him*, by this or any other Bill. There will be hundreds of men unfitted for the position bringing political influences to bear to get them into those places of honor and responsibility, to the great detriment of the service, when they can bring it no ability, no valuable service whatever. It will have a tendency to demoralize the Medical Corps of the Army. I am very sure that it is *that* class who will seek these appointments. There may be honorable exceptions, there may occasionally be a man of distinguished ability, and of eminent qualifications, in the volunteer force, who would desire to enter the regular service; but these instances would be exceedingly rare; generally the applicants would be that class of men who ought not to be promoted, and yet who could bring political influences to bear in aid of their promotion. * * * I am perfectly satisfied that the amendment (to make selections at large), if adopted, will be productive of injury, and not of good: opening the door to a scramble for the medical offices in the Army, just as there is a scramble going on constantly where there are offices to dispose of among politicians—unworthy men, men that are not actuated by patriotic motives, men urged forward by selfish considerations, without qualifications entitling them to the position."

It is not pretended that the members of the regular staff are superior to the best class of volunteer surgeons in ordinary professional knowledge and skill, but it is reasonably presumed that, in the more strictly military and administrative portion of the service, the former should have in its ranks the highest qualifications. And from the tenor of the discussions in Congress the old staff are manifestly, and to us it seems justly, to be held responsible for the duty of giving the proper system and efficiency to the entire medical service of the volunteer army. Crippled and depressed

from lack of military rank and authority though it has long been, still the old staff embodies more than one hundred officers, whose accomplished education and moral positions entitle them to a controlling influence upon all measures necessary for the medical and sanitary interests of the Grand Army. In this respect we believe the powers of the staff are competent even to correct the abuses and neglects that have crept into the volunteer medical corps. We are fully aware that the staff is already overworked, and that whole regiments of regulars are now in the field with only a single assistant surgeon of six months for their medical and surgical care. But it is just this of which the people and the profession justly complain. They demand that there shall be *no lack of the best medical services.* Whatever may be needed to this end the Government will gladly authorize, and the people will cheerfully pay for. Indeed, the people are impatient upon this subject, and we believe they have reason to demand better and more care for their noble sons in the volunteer army. Said the Hon. MR. BLAKE in the House of Representatives last week:—

"I have no doubt that the Army of the Potomac has been well and medically provided for; but it is not so as to the Western boys, who have been murdered by neglect. I have received letters from fathers and mothers beseeching me to have something done, so as to save the lives of their children."

It is to provide more effectually for the hygienic welfare of the forces in the field, and the thousands of sick and wounded in the hospitals, and to guard against neglect and abuses, that an inspectorial and sanitary department appears to be contemplated in the medical reform bills now under discussion in Congress. The regular Staff has the proper men to be put in charge of the new department. To hesitate or to be indifferent in the present effort to secure the needed enlargement and reform, would belie the noble character which that Staff has always sustained: it would dishonor the medical profession. With the skilled services of the ten specially selected and properly ranked officers of inspection and superintendence named in the new law, the Surgeon-General would be able speedily to silence censorious critics and a fault-finding press; whole regiments would daily be saved from sickness and added to the forces in the field, and at least a regiment a month might be saved from the grave!

THE WEEK.

WE alluded a week or two since to the importance of establishing military hospitals in the vicinity of New York. A cogent argument is added to our representations by the circumstance that at the present moment a detachment of soldiers from the Burnside Expedition have arrived in this city, and are now lying in the Park Barracks, with no other comforts than such as are supplied by the citizens. It is a relief in such an emergency to learn that the Surgeon-General has taken steps to open such hospitals, and has commissioned Surgeons TENBROEK and MCDOUGAL, of the U. S. A., in conjunction with DR. SATTERLEE, Medical Surveyor at this station, to select the sites and buildings. To gentlemen so thoroughly familiar with their duties as are those composing this commission, we may confidently look for the early establishment of convalescent hospitals on some of the numerous sites overlooking the Hudson, which combine salubrity and beauty of scenery in an eminent degree.

IN another column will be found a valuable contribution of facts relating to small-pox in the army, and also an excellent model as a form for their embodiment. It was presented to the New York Sanitary Association at its last meeting, having been received in response to a circular of queries, relating to the extent and sources of variola, which was sent to a large number of army surgeons by that association. A similar record of the facts of his regiment, prepared by each surgeon, would place us in possession of a mass of valuable statistics elucidative of many important points which are still in doubt. We commend Surgeon MITCHELL'S tabulation to general imitation.

—

THE Homœopaths of Massachusetts publish in the Boston *Medical Journal* (which admits them in silence) the most absurd statement of their claims to public consideration, with the following remarkable propositions for adoption by Congress:

"1st. Whenever any considerable portion of the officers and soldiers of any brigade desire to have a homœopathic surgeon attached to the brigade, such additional surgeon shall be appointed

"2d. Whenever a majority in any regiment desire a homœopathic surgeon and assistant surgeon, such appointments shall be made.

"3d. Wherever army hospitals are established, a fair proportion of them shall be devoted to homœopathic treatment.

"4th. As allopathic surgeons are, by their education and position, necessarily disqualified for intelligently examining candidates in homœopathic medicine, an additional Examining Board shall be appointed for this purpose, composed of surgeons skilled in homœopathic medicine."

Surgical operations on homœopathic principles, of course, must be infinitesimal—a discouraging prospect for wounded men!

—

THE curse of an army is intoxicating liquors. Even the rebel leaders have made this discovery, and have suppressed the liquor traffic in the vicinity of their armies. The spirit ration is the great source of all this mischief; as long as that is continued, the flame is silently fed, and only waits a favorable opportunity to burst forth. The navy, it seems, suffers from the same evil. An intelligent surgeon in the navy writes from one of the gunboats:—

"If the spirit ration now given in the United States Navy could be abolished, it would undoubtedly result in a marked improvement in the efficiency of the service. At present the ration consists of one gill of whiskey a day to every man that desires it. It seems to be productive of no good, but in the majority of cases does immense harm, by exciting a strong appetite for rum, which when allowed full license on shore, leads to beastly excesses. The result is, the unfortunate returns to the medical officer, a victim of sexual disease, and to duty in a condition unfit for labor."

—

A SURGEON in the volunteer army, of great practical experience, writes from a distant field of service where he has had an opportunity to put into practice the precepts of military surgical authorities:—

"I conjure you in the august name of that humanity which should be identified with the title surgeon, to guard young surgeons against yielding to their eagerness to *cut*, and also to counsel against *primary* amputations, particularly in the thigh, when there is a large wound of the soft parts, combined with fracture of the bone. Of the three 'primary' amputations performed in my presence yesterday, the subjects died, one of them in the very act of the

operation. In each of these cases, with the rules of army surgery stated by the eminent army operators, fresh in my mind, I silently *dissented* from the practice."

—

The actions of our army surgeons upon the field and elsewhere, during the present war, have frequently called forth the unqualified approbation of their professional brethren at home, but in no instance has so high a compliment been paid to their bravery, and their devotion to humanity, as is set forth in the following preamble and resolutions, offered by Dr. A. H. Stevens, at the last meeting of the N. Y. Academy of Medicine :—

"*Whereas*, during the present unhappy war, many of our professional brethren in service among the combatants have risked their lives, or gone into voluntary captivity, rather than desert their sick and wounded, and have exercised their skill alike on friend and foe: therefore,

"*Be it Resolved*, That in such conduct this Academy recognises the true spirit which should ever animate the ministers of humanity, and in testimony whereof,

"*It further Resolves*, To welcome to its sittings those who have acted under these self-sacrificing and generous impulses."

IN MEMORIAM.

DR. A. V. WILLIAMS.

Another of our prominent medical men has passed away to his final reward. Dr. Abraham V. Williams, so long and favorably known both to the profession and to the public, died at his residence at Bloomingdale on Friday, the 7th inst., having reached his sixtieth year.

The memory of Dr. Williams claims something more than a mere passing announcement of his death. For more than forty years he quietly and unobtrusively discharged his professional duties in the neighborhood of this metropolis. To the requirements of a practice essentially rural, he carried a judgment as calm and as clear, and a discretion as large and as sound, as falls to the lot of the most accomplished urban physician. To these he added such genial manners, and so much unfeigned kindness of heart, that had Providence cast his lot in the more thrifty populated portion of the city, his success must have been unprecedented. In the chamber of sickness, his presence was enlivening as the rays of the morning sun.

Dr. Williams was a graduate of the University of the State of New York in the historic days when Post and Hosack and others were Professors. After graduating, he was appointed house physician to the New York Hospital, which place he held for the regular term. He afterwards married and settled in Bloomingdale, which was then some six miles out of the city. There he in time acquired a large practice, and eventually accumulated a competency.

With the malarial diseases of that region he became thoroughly conversant, to such an extent, indeed, that his opinions on such questions have been regarded for years as authority by the medical men of New York.

Trained in his youth in a school of gentlemen, Dr. Williams through life did honor to their precepts. He was refined and reserved in his manners, being unwilling to injure the feelings of others by an unkind or hasty word, and believing them incapable of any rudeness to him. In his domestic relations he was fortunate and happy: an affectionate husband, and a kind and provident father. His home was the abode of peace and quiet. Whatever gentlemanly instincts and refined taste could do to adorn it, was done. He surrounded himself with the rarest productions of nature, and the choicest works of art. Beautiful plants and exotic flowers grew around his dwelling, while rare books and paintings and statuary adorned its interior. The love of nature, which in his early years had enticed him away from the turmoil of the city to the quiet of a country residence, remained to the last fresh and green. Of the Audubons he was for years the tried and trusted friend, and eventually he became connected to them by intimate family relations. Some of their finest pictures graced his walls.

In politics, the sympathies of Dr. Williams were with the masses, and he believed that men were naturally and from principle honest; and that though majorities may be temporarily misinformed, they will always in the end be found supporting justice and truth.

When a member of the Board of Aldermen, his amenity of disposition and unswerving integrity obtained for him the respect of his opponents, while his unwavering fidelity secured to him the love of his friends. In the Board of Education, the records will show him to have been uniformly on the side of progression and improvement—that his vote was always cast for any measure which he believed would benefit the cause of public education.

During his last illness these excellent and amiable qualities were well illustrated. For many years he had been a professor of religion and Churchwarden; and when the hour of his departure approached, *He* whom he had served during life did not forsake him in death, and he anticipated his great change with all that serenity and composure which religion alone can confer. To his wife he remarked that his disease was *pleuro-pneumonia*, a disease of great danger, but that only one side was affected; and that if he should live eight or ten days she might expect him to recover. His intellectual faculties were unclouded to the last; and even when in the final collapse, with skin relaxed and a fluttering pulse, he extended his hand to an old friend with a feeble but earnest welcome: "Doctor," he said, "I am glad to see you;" and these were his last words; in an hour more he had ceased to breathe.

The funeral, on the Sunday following his death, was largely attended by the medical profession and other friends of the family. The whole community feels his loss, and the best interests of humanity mourn. Yet we have one consolation in our sorrow.

The example which such men leave behind them for our imitation is of priceless value. May our young men follow in his footsteps, and may God in his mercy, in the lapse of coming years, send many more such men.

"*The path of the just is as the shining light, which shineth brighter and brighter unto the perfect day.*"

V. M.

Reviews.

Course of Lectures on the Physiology and Pathology of the Central Nervous System, delivered at the Royal College of Surgeons of England, in May, 1858, by E. Brown-Séquard, M.D., F.R.S. 1860. Philadelphia. J. B. Lippincott & Co.

Lectures on the Diagnosis and Treatment of the Principal Forms of Paralysis of the Lower Extremities, by E. Brown-Séquard, M.D., F.R.S. 1861. Philadelphia. J. B. Lippincott & Co.

The study of nervous diseases, hitherto chiefly theoretical, has necessarily led to abstract and erroneous conclusions. No other study requires more positive researches to establish its fundamental principles; but the improvement in this, as in every other subject of such a complex science as Medicine, has been impeded by the want of such principles. This want is mostly due to ignorance of anatomy and physiology, which are absolutely necessary to interpret and properly apply the results of observation. Of the laborers in the field of neuropathology Dr. Brown-Séquard is one of the most capable and efficient in breaking away from traditional routine. Long devoted with unabated efforts and master skill to investigating the normal functions of the nervous system, he is perfectly well prepared to solve the difficult problem of its derangements without resorting to theories.

The lectures "*On the Diagnosis and Treatment of the Principal Forms of Paralysis of the Lower Extremities*," are a natural sequence of those "*On the Physiology and Pathology of the Central Nervous System*." Those minds which still look upon obscure questions of medicine as impenetrable mysteries, involving the curative art in doubt, and unaware that, whatever its purpose, art cannot exist but on true principles, will probably pass over these books as too speculative, and, therefore, barren; but certainly they must greatly misjudge them. They are replete with remarkable and accurate experiments which, combined with numerous pathological cases, most of them borrowed from different observers, directly trace the etiology of the nervous affections. The volume on the physiology and pathology of the nervous centres, places these subjects upon clearer and more positive grounds. It bears in its whole as its sequel the stamp of our anatomo-physiological school, which, unsoiled by the dust of tradition, and guided by true principles, has ever prevented that absurd distinction between a *theoretical* and a *practical*, or so-called *clinical* medicine. Both works, the fruit of mature learning, offer extensive matter for deep and useful reflection, and in their pages no common cause, nor any theory, whether plausibly ventured upon in order to answer the difficulty in every instance, has a place, unless sanctioned by combined experiments and correct clinical observation.

It is impossible for us here to enter into the analysis of all the particulars detailed by Dr. Brown-Séquard, in the lectures on the physiology and pathology of the central nervous system. We will merely glance at those striking points which shall enable the reader to form an opinion of their bearing. For this purpose it is necessary to alter the author's wise arrangement, condensing separately the physiological and clinical deductions. The valuable discoveries of many eminent physiologists authorized us in concluding that the true functions of each organ in the cerebro-spinal axis was finally determined. Nevertheless, the facts put forward by Dr. Brown-Séquard, and the conclusions at which he has arrived, are quite opposite to many previously admitted views on this subject. Let it not be imagined, however, that the great discovery of Sir Charles Bell, concerning the distinction between the anterior and posterior roots of the spinal cord, has been upset by his worthy successor. On the contrary, the last objections urged against it are completely removed by Dr. Brown-Séquard, who proves that the pain attending the irritation of the anterior roots is not due to any sensitive faculty, but to a cramp produced in the muscles; and that the local movements sometimes induced after excitation of the posterior roots, are only reflex movements: the excitation going to the cord, and from thence to the muscles through the anterior roots. A change in the galvanic state of the muscle causes the pain in the first instance; and the greater the resistance to contraction, the greater the galvanic excitation of the nerves in contact with the muscles, which exist not when there is no resistance after the section of the tendon, as shown by Matteucci. These phenomena plainly account for the pains of the uterus during parturition, of the sphincter in fissure of the anus, of torticollis, etc. As a consequence, tenotomy of a contracted muscle at once diminishes the attending pain, or it completely disappears. Our movements seem likewise guided by that peculiar sensation we derive from the galvanic irritation of certain sensitive nerves of muscles while they contract.

One of the questions most thoroughly investigated by Dr. Brown-Séquard is the transmission of our impressions to the encephalon. He has entirely overcome the difficulty of experimenting upon the spinal cord, the main cause of disagreement once prevailing upon this cardinal subject, and gives us the following results of his researches:—Part of the anterior columns, and chiefly the central grey matter (not excitable in itself, though becoming so when inflamed), are in the spinal cord the channels of sensitive, as well as of pure tactile and painful impressions. The sensitive conductors from the trunk and limbs decussate in the central gray matter shortly after entering either directly, or after going up and down a little way in the posterior columns, and most likely too, in the posterior part of the anterior columns. The arrangement is such that every small portion in the cord seems to contain conducting elements from all the points on the opposite side of the body: a disposition explaining the rarity of complete anæsthesia in diseases of the spinal cord.

The restiform bodies, a continuation of the posterior columns, and the cerebellum connected with them, do not receive any sensitive elements. Vivisections, and several instances of diseases in those organs, prove that no loss of any kind of sensibility takes place under such circumstances. Even in cases of absence, or total destruction of the cerebellum, sensibility has persisted; and it is particularly deserving of notice that diseases of the cerebellum, or its extirpation in animals, determine the want of co-ordination of movements by irritative influence upon the unaltered parts of the encephalon, and not on account of the absence of that nervous centre. The mass of evidence sustaining these facts overturns the theory of Longet and others, who believe that sensitive impressions are transmitted through the posterior columns, and that their place of decussation is in the restiform bodies. To destroy every doubt Dr. Brown-Séquard adds to many corroborative pathological cases on record the evidence of experiments, which prove that a transversal section of the posterior columns brings on hyperæsthesia, instead of anæsthesia, which is, however, complete, when all the cord but the posterior columns is transversally divided.

The grey matter of the spinal cord, besides serving as intermedial between the encephalon and the sensitive conductors, has also great share in the conveyance of the orders of the will, never passing through the posterior columns, and likewise traversing more through the cervical than the dorsal and lumbar regions of the anterior columns.

The posterior columns are the principal channels for excitations which produce reflex movements. An alteration in a small part of their extent does not impair these latter movements; but if it occupies all their length and thickness, or the whole of the lumbar swelling, it brings on a loss of the reflex actions of the limbs, and upon it impossibility of standing and walking. However, in bed the patient can move easily the lower limbs. The anterior columns everywhere, except in the upper part of the cervical region, have a large share in voluntary movements, the conductors of which chiefly decussate in the anterior pyramids. Above and below them there is no decussation of the voluntary motor-fibres of the trunk and limbs. This view, already advanced by Mistichelli, Pourfour, du Petit, and others, and now confirmed by the researches of Dr. Brown-Séquard, disproves the theory of Cruveilhier, Todd, Foville, Valentin, Longet, and other authorities, who admit the decussation of nerve-fibres all along the median line of the base of the encephalon.

(To be Continued.)

Correspondence.

AMAUROSIS BY INJURY OF THE SUPRA-ORBITAL NERVE.

[To the Editor of the American Medical Times.]

Sir:—In your issue of the 15th inst. is the record of a very interesting case of *amaurosis by injury of the supra-orbital nerve*, observed by Dr. Henry D. Noyes. He considers this instance a direct proof that amaurosis may depend upon injury of the supra-orbital nerve; but not finding how to explain positively the filiation of the phenomena exhibited by the patient, he concludes that to connect them understandingly is certainly very difficult. However, from the details of the case, and from the accurate

examination of the eye with the ophthalmoscope, it seems evident that the real cause of the disease exists in a morbid reflex action of the supra-orbital upon the optic nerve, the patient having, therefore, *reflex amaurosis.*

That reflex actions are, more than generally suspected, the source of disturbances in nutrition and in functions of the same nervous system, is now a truth proved by the researches of Dr. Brown-Séquard and other physiologists. The eye is precisely one of the organs that gives the most evidence and the most frequent examples of this kind of derangement. Surgeons are well aware of the facility with which inflammation and other diseases communicate from one to the other eye. Besides, Morgagni, Deval, Notta, and several others, have recorded numerous instances of amaurosis from neuralgia. The coincidence of both diseases, the fact that the one yielded when the other was cured, or that section of the nerve between the place affected and the brain, abolishing reflex action, made also amaurosis disappear, convince that this latter could not be consequent but upon the morbid reflex influence exerted upon the optic nerve. Moreover, it is not only amaurosis which ensues on injury as well as on neuralgia of the trigeminal nerve. Notta observed twice a cataract produced in a healthy eye: one after a wound of the frontal nerve, and the other after neuralgia of the same nerve. Prof. Paul F. Ere of Tennessee, U. S., suggested the idea of the extirpation of a carious tooth to Dr. H. F. Campbell, in a case of ophthalmia, and the operation having been performed, the patient was at once cured.* Yet the reflex influence upon the eye may start from distant organs; therefore, the stomach, the uterus, the kidneys, etc., may be often the origin of the disease. Amaurosis, deafness, aphonia, have been immediately cured after expulsion of a tænia, and these, as the preceding facts, could not be otherwise considered than the reflex effect of the irritation upon the intestinal mucous membranes, or on the already mentioned organs. As in the beginning stated, the whole nervous system may be affected in a similar way, for paralysis, epilepsy, chorea, eclampsia, insanity, etc., may be seen as the result of such a morbid influence, likewise capable of determining the most remarkable changes in nutrition: as inflammation, gangrene, and other diseases of the skin, bones, etc.

The distant influence of an organ upon another is easily demonstrated in physiology—and the following experiment, due to Cl. Bernard, is one of the most evident proofs of such phenomenon. Four or five days previous to hatching, the crop, both in the male and female of pigeons, is covered with large papillæ, secreting a whitish liquid like milk. If one nerve pneumo-gastric, in a pigeon who broods, is divided two days before hatching, the bird abandons the eggs and afterwards dies. On examining the crop the papillæ will be found scarcely apparent on those parts corresponding to the divided nerve, whilst on the contrary they will be most developed on those supplied by the nerve lasting untouched. Now, could a reflex action be more striking? Nor could any other cause account better for the following phenomena:—secretion of milk brought by irritation of the womb or the vagina; menstruation by irritation of the mammæ; perspiration of the face after excitation of the nerves of the taste; the frequent appearance of a herpetic eruption supervening upon neuralgia of the nerves supplying the affected skin; paraplegia from affections of the lungs, the bowels, the genito-urinary organs, or any irritation on a sensitive nerve; and lastly, other kinds of paralysis, as well as of nervous derangements, arising out of peripheral irritations? May we not assert then fairly, that the case recorded by Dr. Noyes, so identical with those here metioned, is one of *reflex amaurosis*, notwithstanding the opinion of Haynes, Walton, Müller, Sichel, and those who emphatically deny, without positive proof to sustain their absolute assertions, that amaurosis, when associated with lesion of the nerves in the forehead, is due to coincident injury of the eye and of the optic nerve?

Yours, etc.,

M. Gonzalez Echeverria.

New York, March 17, 1862.

* For this and other analogous cases proving the influence of reflex action on the production of many diseases, see Dr. Brown-Séquard's Lectures on the Physiology and Pathology of the Nervous Centres. Phila. 1860, p. 151 et seq.

INFLUENCE OF CONCURRENT DISEASES ON VACCINE VIRUS.

[To the Editor of the American Medical Times.]

Sir:—The communications of Dr. Henry M. Lyman, on the *accidents* which may follow vaccination, published in recent numbers of the American Medical Times, have served to recall to my memory so vividly an "accident" of a different character, which forced itself upon my attention, and afforded so fine an illustration of the unchangeable nature of the vaccine lymph, that I am tempted to transcribe it for your perusal:—

In 1849 a gentleman and his wife, with a little daughter three years old, had apartments in a hotel on the Canadian side of the river, which they left in consequence of the breaking out of small-pox in the same hall on which this family resided. By request of the parents I vaccinated the little girl, the day after they came to Detroit, with recent and active virus. The formation of the vesicle progressed so naturally, and was attended with so much fever on the day for its culmination, that I supposed we had triumphed over the small-pox. At the request of an intimate friend of this family I inserted some lymph taken from this vesicle into the arm of one of her own family, supposing that the fever attendant upon the vaccine disease was incident to it, and not a symptom of variola, as it proved to be the second day after. When this eruption came out, the friends of both the little patients, as well as myself, became nervously anxious to know what would be the product of a vaccination done with lymph matured amidst the fermentation of a genuine variolous fever, just on the eve of producing its eruption. To our great gratification it proved to be only a benignant case of vaccine disease, running its legitimate course, and producing a virus which acted with ordinary mildness upon other persons.

Quite recently a similar conjunction of circumstances has enabled me to repeat as an experiment what the "accident" formerly gave me the means of taking note of. On a day that could be specified an inmate of St. Mary's Hospital was exposed to the contagion of small-pox. When this came to my knowledge, two days afterwards, he was vaccinated. The vaccine vesicle filled on the tenth day. On the twelfth, when the small-pox eruption was pretty fully out on the face, the vaccine vesicle was punctured, and the lymph which flowed transferred to the arm of a healthy adult. The effects produced by this lymph were such as we ordinarily see when the matter used is taken from an adult of a good constitution and in vigorous health. Others were vaccinated with the matter thus produced, in which cases there were no peculiar symptoms.

Not only such isolated facts, but the observations of forty years' familiarity with this subject, in epidemic seasons and in seasons of uncommon salubrity, in hospitals and in the private walks of professional life, have forced me to the conclusion that the *vaccine lymph* is *never* the medium by which other constitutional affections are transplanted from one person to another. There are seasons and states of the system not always dependent upon an epidemic constitution, when the crust, *after* the constitutional symptoms which developed the vesicle have subsided, may become vitiated by an imperfect pustulation, to which it is liable when the system of the subject is charged with the poisons characteristic of eczema, of typhoid fever, of erysipelas, of rubeola, or of syphilis. The putrefactive processes thus set up around the crust destroy the specific qualities of the vaccine virus, give origin to the unseemly scars that sometimes follow vaccination, and the matter thus developed or transformed may produce constitutional effects not germane to the vaccine disease, and such as the

lymph would not have occasioned if used before the disease engendering it had passed its point of culmination.

As before stated I have used, without the production of any untoward result, vaccine lymph taken from a vesicle surrounded by the small-pox eruption. I have tried it when the measles had come out fully, before the desiccation of the vesicle commenced, with a like happy effect; and in one single instance I have used a vaccine crust, that was dried under the pungent heat of scarlatina, without any effect whatever, as if its vitality had been destroyed by the intensity of the poison of scarlet fever.

If care is taken to reject those crusts around which there has been no pustulation, and which have not been increased in thickness by secondary exudations, absolute immunity from blame for pathological hybridism may be claimed by the crust as by the lymph of vaccinia.

Yours, etc.,

Z. P.

Detroit, March 17, 1862.

Army Medical Intelligence.

REPORT ON VACCINATION OF THE EIGHTH PENN. CAV.

	Total.	Prior to entering the Regiment.									Vaccinated *after* entering the Regt.
		Vaccinated but once.	Re-vaccinated.	Inoculated.	Vaccinated unsuccessfully.	Not vaccinated.	Not vaccinated, but had variolous disease.	Re-vaccinated, and had variolous disease.	Inoculated, and had variolous disease.	Vaccinated, and had variolous disease.	
Field and Staff	14	9	5	0	0	0	0	2	0	0	0
Company A.	78	52	15	1	4	6	0	3	0	8	10
" B.	93	61	20	0	2	9	3	0	0	0	11
" C.	84	11	0	0	2	4	1	0	11	2	
" D.	86	61	17	0	0	2	6	1	0	7	2
" E.	71	55	8	0	0	7	1	1	0	10	7
" F.	90	77	12	0	0	0	1	1	0	3	0
" G.	95	74	12	0	0	9	0	0	0	4	9
" H.	93	77	15	0	0	1	2	1	0	6	1
" I.	87	70	13	0	0	3	1	1	1	14	3
" K.	95	75	17	0	0	3	0	0	0	6	3
" L.	72	46	18	2	0	1	5	0	0	3	1
" M.	85	63	11	0	1	7	3	0	0	5	8
Total	1044	784	174	8	7	50	26	11	1	77	57

Sam. B. Wylie Mitchell, Surgeon.

Camp Lesley, Va. (West of Fort Corcoran), Dec. 31, 1861.

DEATH OF DR. MINIS.

Head-quarters, Department of North Carolina, Roanoke Island, February 14, 1862.

General:—Since handing in my report I am deeply distressed to hear of the death of Surgeon Minis, of the 48th Reg., Penn. Vols. Dr. Minis was detailed to serve with the 9th Reg. N. J. Vols., to fill the position rendered vacant by the death of Surgeon F. J. Weller, who was drowned at Hatteras Inlet.

Words cannot express to you my distress at the loss of Dr. Minis. During the action of Feb. 8th he had charge of the Hospital at Ashby's house. He worked there unceasingly day and night until yesterday. I never gave him an order, for the reason that he always promptly performed any duty asked; even our short acquaintance had inspired me with the greatest respect and admiration for his character, and in his death you and the army have every reason to deplore his loss.

I saw him yesterday, and he agreed with me in the conviction that his illness would be but slight, and I then left him, my mind impressed with the fear that I had overtaxed a too willing professional brother. If there is any mark of respect that can be bestowed upon a deserving officer, I most urgently request that it may be extended to my deceased friend, as every regiment owes him a debt of gratitude.

I am, General, very respectfully,
Your obt. servt.,
Wm. Henry Church,
Brigade Surgeon and Medical Director.

GENERAL ORDERS.—No. 10.

Head-quarters, Department of North Carolina, Roanoke Island, February 14, 1862.

2. The General Commanding desires to render a tribute to the memory of Dr. Minis, of the 48th Penn. Vols. He was detached from his own regiment and appointed to accompany the 9th New Jersey, then going into the field. He lost his life by disease, brought on by his untiring devotion to the wounded during and after the action of the 8th.

To the forgetfulness of self which kept him at his post at the Hospital, regardless of rest or sleep, the Department owes a debt of gratitude.

By Command of Brigadier General A. E. Burnside.
(*Signed*) Lewis Richmond,
Assistant Adjutant General.

Medical News.

A new oath has been promulgated for the benefit of the Austrian army doctors. The *Wiener Medicin Wochenschrift* says that it is a great improvement on the old one, which occupied four closely written pages. The following is a clause in this new oath:—"You swear to devote yourself manfully to the good and the service of the sick and the wounded, whoever they may be, and wherever the will of his Imperial Majesty may order, by land and by water, by day and by night, in battle and in storms, in fightings and strugglings of every kind, in every place, at all times, and on all occasions, with eagerness and self-sacrifice, and to shun no danger." Notwithstanding his oath, the Austrian army surgeon is held as a "non-combatant;" and this is one of his grievances.—*Brit. Med. Journ.*

Seventh Annual Report of the Board of Trustees and Officers of the Southern Ohio Lunatic Asylum, for the Year 1861.—From the only table given, we learn that the number of patients in the Asylum, Nov. 1st, 1860, was 157; admitted during the year ending October 31st, 1861, 99; remaining November 1st, 1861, 159. Discharged as recovered, 59; improved, 8; unimproved, 21; died, 8; not insane, 1.—*Cin. Med. and Surg. News.*

Sickness amongst Eminent Medical Men.—Three of the leading medical men of Vienna are at present on the bed of sickness. Professor Dumreicher is suffering from pericarditis; M. Sigmund is just recovering from pneumonia; and Professor Rokitansky has been obliged to take to his bed owing to the serious turn which a chronic affection, from which he has been for some time suffering, has lately taken.—*Lancet.*

Death of M. Bretonneau.—This distinguished physician has just died at an advanced age, at Passy, near Paris, where he occupied a noble villa. M. Bretonneau's name is connected with some of the most valuable discoveries in medicine, and had risen to great eminence by his teachings and original turn of mind. The two leading men of the medicine and surgery of Paris respectively, M. Trousseau and M. Velpeau, were his pupils.—*Lancet.*

A Hospital for Students.—An establishment of this kind has lately been founded at Vienna; and a ball in aid of its funds will shortly be given under very distinguished patronage.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 15th day of March to the 21st day of March, 1862.

Deaths.—Men, 95; women, 82; boys, 144; girls, 96—total, 417. Adults, 177; children, 240; males, 239; females, 178; colored, 5. Infants under two years of age, 152. Children reported of native parents, 33; foreign, 200.

Among the causes of death we notice:—Apoplexy, 2; Infantile convulsions, 32; croup, 3; diphtheria, 12; scarlet fever, 27; typhus and typhoid fevers, 8; consumption, 54; small-pox, 7; dropsy of head, 17; infantile-marasmus, diarrhœa and dysentery, 23; inflammation of brain, 8; of bowels, 8; of lungs, 16; bronchitis, 7; congestion of brain, 11; of lungs, 0; erysipelas, 8; whooping cough, 8; measles, 2. 265 deaths occurred from acute diseases and 87 from violent causes. 281 were native, and 136 foreign; of whom 83 came from Irelar d; 0 died in the Immigrant Institution, and 51 in the City Charities; of whom 14 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Mar. 1862	Barometer.		Temperature.			Difference of dry and wet bulb. Thrm.		Wind.	Mean amount of cloud.	Humidity Saturtion, 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In	°	°	°	°	°			
15th.	29.80	.50	37	32	36	.05	1	N.E.	10	980
16th.	29.40	.50	36	30	41	3	6	N.E.	9	809
17th.	29.61	.18	35	28	42	5	7	W.	3	681
18th.	30.00	.20	32	25	40	6	9	N.W.	1	602
19th.	30.14	.14	32	20	44	7	11	N.W.	.02	566
20th.	30.00	.25	35	30	40	3	7	N.E.	10	784
21st.	29 64	.40	36	30	44	1	2	N.E.	10	930

REMARKS.—15th, Rain all day, about half an inch. 16th, Light rain A.M., light snow P.M.; min. Barom. 29 11 inches. 17th, Cloudy A.M.; clear late P.M. 18th, Fresh wind all day; very dry. 19th, Fresh wind all day; very dry. 20th, Very light rain A.M. 21st, Rain storm A.M. Rain fall for the week, one inch.

MEDICAL DIARY OF THE WEEK.

Monday, March 31.
- NEW YORK HOSPITAL, Dr. Markoe, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M.
- EYE INFIRMARY, 12 M.

Tuesday, April 1.
- NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

Wednesday, April 2.
- NEW YORK HOSPITAL, Dr. Cock, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Sayre, Is. Hos., half-past 1 P.M.
- EYE INFIRMARY, 12 M.
- ACADEMY OF MEDICINE, 8 P.M.

Thursday, April 3.
- NEW YORK HOSPITAL, Dr. Markoe, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Elliot, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

Friday, April 4.
- NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Flint, half-past 1 P.M.
- EYE INFIRMARY, 12 M. Dr. Noyes's Lecture, half-past 1 P.M.
- SURGICAL SECTION, 8 P.M.

Saturday, April 5.
- NEW YORK HOSPITAL, Dr. Cock, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Wood's Clinic, 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

BELLEVUE HOSPITAL MEDICAL COLLEGE.

ORDER OF LECTURES IN SPRING SESSION, 1862, FOR THE WEEK ENDING APRIL 5.

Monday, PROF. MOTT, 12 M.
Tuesday, PROF. CHILDS, 12 M.
Wednesday, PROF. SAYER, at Island Hospital, 2 P.M.
Wednesday, PROF. FLINT, at Island Hospital, 3 P.M., (steamer leaves at 1½ P.M.)
Thursday, PROF. WOOD, 12 M.
Friday, PROF. CHILDS, 12 M.
Saturday, PROF. FLINT, JR., 12 M.
Clinical Lectures by PROF. TAYLOR, Thursday, 1½ P.M.
" " by PROF. MCCREADY, Friday, 1½ P.M.

The order of Lectures for the coming week will be published weekly in the N. Y. MED. TIMES.

SPECIAL NOTICES.

The Regular Monthly Meeting of the NEW YORK SANITARY ASSOCIATION *will be held at 7½ P.M., Thursday, April 3d, at Room No. 19, Cooper Institute.*

A series of resolutions in favor of further legislation to secure more general and effective vaccination and revaccination, will be taken up for discussion.

A report on Sanitary Legislation may be expected.

THE NEW YORK ACADEMY OF MEDICINE.—*On Wednesday, April 2d,* DR. SIMMS *will read a paper on "Vaginismus," and* DR. PURPLE *will read a Memoir on the late* JOHN STEARNS, M.D., *and his Writings, the first President of the Academy.*

John W. Shedden, Apothecary,
363 Bowery, cor. 4th St.

Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

P. W. BEDFORD,
PHARMACEUTIST,
REMOVED TO
745 *Sixth Avenue, near Forty-fourth Street,*
Opposite Sixth Avenue Railroad Depot.

Descriptive Circulars with Samples of Work will be sent mail free.

Having just completed the most successful season's business they have ever enjoyed—wherein they have demonstrated that, *for all kinds of work*, they have "THE SEWING MACHINE OF THE WORLD"—enter upon the New Year with still more IMPORTANT IMPROVEMENTS, the latest being their

"NEW TAILORING MACHINE."

Having heretofore aimed almost wholly to supply a Family Machine, which should do all kinds of family sewing, and HAVING SUCCEEDED, we now enter the market with a Manufacturing Machine, which, for elasticity and strength of stitch—for rapid movements—for simplicity and durability, defies competition. While adapted to make the HEAVY ARMY AND NAVY COATS, with linen thread, it can, by a slight change, be made to do the fine family sewing; thus combining in one machine adaptation to FINE FANCY SEWING and HEAVY MANUFACTURING. This can be best appreciated by those who have owned and operated machines. We do not ask or expect the public to be governed by our statements alone. *We court investigation*, and refer to the thousands who have our machines in successful operation.

FINKLE & LYON SEWING MACHINE CO.,
538 Broadway, New York.

Bellevue Hospital Medical College.—
SPRING COURSE OF LECTURES. The Spring Course of Lectures in this College will commence on Wednesday, March 26th, at 1½ M. Lectures will be given daily, by members of the Faculty of the College, from 12 o'clock M. to 3 o'clock P.M., including Clinical Instruction. The Course will continue during the months of April and May.

SUBJECTS OF LECTURES.

Diseases of the Breast.....Prof. Wood.
Diagnosis.....Prof. Flint.
Comparative Anatomy.....Prof. Childs.
Diagnosis of Diseases peculiar to Females and Infants at the Breast.....Prof Elliot.
Microscopic Anatomy.....Prof. Flint, Jr.
Operations on the Head and Neck.....Prof. Mott.
Diseases of the Placenta.....Prof. Taylor.
Clinical Medicine.....Prof. Macready.
Syphilitic Diseases.....Prof. Sayre.
Puerperal Diseases.....Prof. Barker.
Fractures and their Treatment.....Prof. Smith.

For attendance during this course, a matriculation fee will be alone required, and they who matriculate now will not be required to do so for the next winter session. The order of Lectures for the coming week will be published in each successive number of the MEDICAL TIMES during the continuance of the course.

Members of the profession are invited to attend the Lectures of this Course.

AUSTIN FLINT, JR., M.D., SECRETARY.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians (principally country Physicians) Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bonrbon, Villenenve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Grannle contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Grannles daily.

LABELONYE, Phen., 19 Rue Bourbon Villenenve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyosciamus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villenenve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.
By SAMUEL R. PERCY, M.D.,
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE V. PART II.

THE ACTIVE PRINCIPLE OF COLCHICUM—COLCHICINA.

With the principle which I have prepared, and which is identical with the *colchiceine* of Oberlin (and of the chemical differences between this and the *colchicin* of Geiger and Hasse I have already spoken), I have tried some physiological experiments. To a full grown dog, weighing about twelve pounds, I administered one grain, finely rubbed up with one drachm of sugar, and enveloped in a thin slice of meat; this was thrust down the throat. For about one hour no change was noticed, excepting a gradual increase in the frequency of the pulse, being at the end of the hour fifteen beats more than at the commencement. Gradually the dog began to show restlessness and pain. In two hours he had a full copious discharge from the bowels, the first portions of which were natural in appearance, but the latter portion was light colored, pultaceous, and very frothy; vomiting also commenced, which at first consisted of thin mucus, but as the retching continued, the mucus thrown up was small in quantity, and freely tinged with blood. Urine was passed at first freely, and as an old dog usually passes it, but as the dog grew weaker, many ineffectual attempts were made, and constant straining in the way which a young dog usually uses, without throwing up the leg; although the efforts to urinate were frequent, no urine was passed after three and a half hours. The pulse in two and a half hours was thin, wiry, and frequent. In six hours the pulse was small, feeble, and reduced to twenty-four beats in the minute. In the meantime the diarrhœa had been very troublesome; the discharges were thin, ochre-colored, frothy, with frequent patches of bloody mucus. After the seventh hour the dog did not attempt to rise, the pulse became small, thready, and intermittent, and he died a little before the eighth hour, without convulsions. Upon post-mortem examination the heart contained much thick, pitchy black blood, and the same also was found in the ascending and descending aorta as described by Bley and even in the arteries of the legs and neck; the mucous membrane of the stomach was only slightly congested, but the whole mucous membrane of the small and large intestines was inflamed, even down to the anus, near which there were several large abrasions. Upon removing the kidney, and dividing it with a sharp knife, the first appearance was one reddened inflamed mass, and upon more minute examination the Malpighian bodies were very red and much congested, the interlobular plexus was also very much congested, and the congestion extended even to the infundibula and pelvis of the kidney.

Two grains were given to another dog, which died in eleven and a half hours with all the symptoms above described. Towards the pyloric extremity of the stomach there was an irregular patch of about the size of a dollar, highly congested; the other parts of the mucous membrane were not much changed; the small and large intestines were like those in the other dog; the heart contained the same black, pitch-like blood; the kidneys were if anything more congested than those before described; the bladder was entirely empty.

To a dog, weighing about fourteen pounds, two grains of this colchicina were given finely rubbed up with a drachm of sugar, and a scruple of tannic acid. The whole was enveloped in a slice of meat, and pushed down the throat. The restlessness of the dog seemed greater than with either of the others described. There was retching in half an hour, and in about an hour free vomiting. In an hour and a half there was copious diarrhœa. Thirty grains of tannic acid were now given, but it did not control the diarrhœa; there was not the same desire to urinate as shown by the other dogs, but no urine was passed after the fourth hour. The dog died in fourteen hours. The post-mortem appearances were nearly the same as in those described, excepting that the kidneys were not so generally inflamed, though there was great congestion of the malpighian bodies and interlobular plexuses, but it did not extend beyond them as in the other case; the bladder contained about a teaspoonful of very dark-colored urine. Thus tannic acid is no antidote to colchicina.

To a cat, while under the influence of chloroform, was administered one grain of colchicina, enveloped in a small round ball of bread. In a little more than an hour it purged her freely, and produced very great uneasiness, as she prowled round in a restless and timid way, and constantly moaned. The tenesmus with the dogs was great, but with this cat it was very severe, so long as the strength lasted she seemed to make almost one continual strain. The cat died in eight hours. There was congestion of the stomach, intestines, and lungs; the right side of the heart was empty, but the left ventricle was distended with pitch-like black blood. The kidneys presented the same appearance as in the dog I first described.

Therapeutical Applications.—To a gentleman suffering with an acute attack of gout I administered one-forty-fifth of a grain of colchicina, three different times, at intervals of four hours. It produced no effect upon the bowels, but the urine was largely increased in quantity, and contained a very large amount of urate of ammonia and mucus. I could not perceive that it produced much change in the pulse. The dose was now increased to one-thirtieth grain, which I was obliged entirely to suspend after the third dose. The pulse fell in frequency twenty-eight beats, the urine continued to flow very freely, and still contained the same large amount of urate of ammonia and mucus; the bowels were opened several times, the discharges were of an ochre color, very frothy, and had a strong urinous smell; there was some tenesmus, and an inordinate amount of flatus, which rather amused him at first, but eventually became quite painful. As I remained some time with my patient, and saw no cause for fearing too severe an action, I gave nothing but large quantities of mild diluents. I had no occasion to repeat the medicine, as it completely arrested the paroxysm. The urine that was passed before the administration of colchicina was small in quantity, of very dark color, deposited uric acid in large quantity on cooling, and was of sp. gr. 1·021. That passed after the third dose of colchicina was large in quantity, of much lighter color, containing a very large quantity of urate of ammonia and mucus, and was of sp. gr. 1·030. That passed after the bowels had been very freely acted on was still large in quantity, and contained about the same quantity of urate of ammonia and mucus, and was of sp. gr. 1·025, thus making a difference in the amount of solid matters discharged of about twenty per cent. even in the same quantity of urine passed; but as the amount passed was certainly four or five times larger, the amount of effete matters carried off in this way must have been very great.

Another case of gout coming under my notice about the same time, I gave one-thirtieth grain of colchicina, and repeated it seven times at intervals of from four to six hours. It acted more quickly on the bowels than in the previously mentioned case, producing the same ochre-colored, frothy, and urine-like smelling discharges as before spoken of, and producing much flatus and some tenesmus. The increase in the quantity of urine passed was very marked; the sp. gr. increased from 1·018 to 1·024, and uric acid and mucus were deposited in large quantities. This is the only paroxysm that this gentleman has had.

There is one other person to whom I have administered the colchicina. This person was suffering from a subacute, or rather chronic, attack of gout; he had gouty concretions of urate of soda, and enlargement of the joints. I gave him one forty-fifth grain three times a day for ten days. It acted freely on the bowels three or four times daily, producing flatus to such an extent that he had to keep watch on himself when any one was near. The urine was increased in quantity and in specific gravity, and deposited large amounts of uric acid on cooling. He was very much benefited by the treatment. I find no other mention of the use of this agent in the treatment of disease, excepting by *Dr. Guensberg*, of Breslau. He has used it in many cases since 1853. Patients that had long suffered from gout, took, during the painful paroxysms of the swellings of the joints, one-sixtieth of a grain (of Geiger's) three times daily. In every case the remedy acted as an intense excitant of the intestinal secretion, even in such patients who had always before suffered from constipation. After three or four weeks' use of the colchicin, patients who before had suffered from an attack every two or three months, remained entirely free for a year or longer. But in acute articular rheumatism its employment did, contrary to his expectation, but little or no good.

Modus Operandi.—We have not a very large number of physiological experiments from which we may draw inferences as to the modus operandi of colchicina; but the few experiments that are given demonstrate its effects with greater accuracy than is usual with new remedies. We see by the physiological experiments on animals of Geiger, Albers, Hoppe, Aschoff, Bley, and Schroff, that colchicina uniformly acts as an irritant to the mucous membrane of the intestinal canal, producing frequent and copious alvine discharges; that given in the quantity of one grain or over to the smaller animals, it universally caused death, with pathological evidences of gastro-enteritis. We see, also, by the experiments of these gentlemen, that it enters the circulation and produces upon the blood the changes that a mere acrid poison does not necessarily produce. Aschoff and Bley have demonstrated its existence in the secretions. All of the experiments performed, those of my own included, demonstrate that, although it induces vomiting, the vomiting only takes place after a considerable time, that it is first absorbed, and that the vomiting is but the consequence of the gastro-intestinal irritation. Although it has been common to call colchicum an acrid narcotic, we see that it possesses no narcotic properties, that it has no special action upon the brain or spinal marrow, and that a very large increase of the dose but little increases the intensity of the symptoms, and does not hasten death. We see by the physiological experiments performed by myself, and also by the therapeutic action in the cases I have reported, that in addition to the effects above mentioned, we have an increase at first in the amount of urine discharged; but in poisonous doses the urine is soon entirely suppressed, owing to inflammation of the kidneys. This is not mentioned as one of the actions of this medicine by the gentlemen whom I have just quoted; but in the experiments I performed it will be remembered that no animal to which I administered it passed any urine after the fourth hour, and that after death none was found in the bladder. Upon examination of all the animals that I experimented upon, pathological changes, which alone were sufficient to cause death, were found in the kidneys; in two of them the whole organ was inflamed, and the congestion extended to the infundibula and pelvis. In the dog to which I administered tannin in connexion with the colchicina, the kidney was less inflamed than in the other animals, but a smaller quantity of urine was passed by this animal, and the desire to urinate was less urgent. After death the malpighian bodies and interlobular plexuses were found highly congested. This was sufficient to prevent the elimination of any urine, and it appeared to me that the astringency of the tannin had had the effect to retard the passage of as much as usual of the poison through the kidneys. It will be seen in the cases in which I record the therapeutic action of the remedy, that the quantity of urine was largely increased, and that the effect was produced even before its action on the bowels; that in addition to the increase in quantity, there was also a very great increase in specific gravity, and that the amount of urates and mucus was very large. Guensberg, who alone in addition to myself has tried the therapeutic effects of this remedy, has only noticed that it acted as an intense excitant of the intestinal secretion; but his were chronic cases, which he probably saw but once a day; but he found that it produced absorption of the swelled joints. Schroff, who administered it by way of experiment to a person in health, states that "the urine was like whey, with abundant white sediment." It will be noted, then, that we have given several instances wherein, administered in medicinal doses, colchicina increases both the quantity, specific gravity, and uric deposit of the urine. Let us turn again to the character of the fæces discharged; all state it to be large in quantity, mucoid, and frothy, and when it has been particularly examined, I have stated that it has a strong urinous smell. This effect is as marked with the administration of tincture of colchicum as with colchicina; and once, some years ago, I examined the fæces of a gouty person while under the influence of colchicum, and found them to contain a large amount of uric acid. It will be remembered that *Chelius*, of Heidelberg, many years ago, endeavored upon theoretical reasonings to explain that colchicum cured gout by eliminating uric acid from the blood, because he noticed that under the action of colchicum the amount of uric acid in the urine was much increased. This is disputed by those celebrated men Dr. Pereira and Dr. Graves, who not only deny that colchicum augments the excretion of uric acid, but state that it rather diminishes it when the remedy is given to its full effect. This, in my opinion, is one of the best evidences in proof of the theory of Chelius, for the gentlemen just named carry their observations only so far as to state that under the full effects of colchicum the amount of uric acid in the urine is decreased; here their observations cease; they make no examination of, or investigation into, the character, amount, and composition of the alvine discharges, nor have they examined the blood before and after the administration of colchicum. As I have just stated, I have in one instance proved that tincture of colchicum administered to a gouty person to its full purgative effect, produced the elimination of a large quantity of uric acid in the fæces; that the urine before the purging contained more uric acid than it did after. In other instances where it was administered in small doses, not sufficient to produce purging, the uric acid in the urine was greatly and persistently increased. In the cases which I have reported of the therapeutic action of colchicina, we find the quantity of urine increased, as well as the specific gravity, and that the urates were in great abundance. This occurred from the time of the administration of the dose until free purging was produced; then the specific gravity was less, and the quantity discharged less, but both were more than before the administration of the colchicina. Guensberg found colchicina reduced the gouty swellings, and for many years colchicum has been used to reduce the deposit of urate of soda occurring about the joints. It would seem, then, to me, viewing the various effects we find produced by colchicina, that its *modus operandi* consists in its removal from the system of a large amount of urates. Chelius stated this to be its effects by noticing the augmentation of uric acid in the urine only; I think I have demonstrated his observations to be correct, not only in the amount of urates, but in the increase of the specific gravity also, and also by its presence in the alvine discharges. But the excellent work of Dr. Garrod fully explains these facts. In poisonous doses it first stimulates the kidneys, then the intestines; and destroys life at last, not only from the inflammation it produces in these organs, but by its preventing any secretion of urine, and by its acrid, poisonous properties upon the

blood. Could the kidneys continue their functions, it would all be eliminated, and the system would recover from the poison; but, like most acrid poisons, it inflames and paralyses the kidneys, and is thence retained in the system, changing the character of the blood. I need hardly discuss the question of its absorption. I have so frequently during the session given you demonstrable proofs, by physiological experiments, that this class of remedies is absorbed into the circulation before they produce their peculiar effects upon the system, that repetition here I deem unnecessary. Being absorbed into the system, its action is catalytic, producing some peculiar change in the character of the circulating fluid, stimulating certain of the excretory glands, and passing out of the system after it has produced its peculiar effects. Its primary effects are upon the blood, for we find, when given in too small doses to act upon the bowels, that it always stimulates the kidneys, and increases the amount of excreted metamorphosed tissue. That its action on the blood is of that peculiar character to cause a rapid elimination of this product, is proved by the increase of the urates in the urine, and by their presence in large quantities in the fæces. Its action on the bowels, then, though always hitherto spoken of as its primary action, I deem but secondary to that upon the kidneys; and when the kidneys are unable to eliminate either it, or the changed materials that it produces, the blood becomes so altered as to be unable to become arterialized, and is found in the heart and arteries after death black and pitch-like.

Uses.—From the physiological effects of colchicina we may ask, What are its uses? We have seen from several cases that it has given speedy relief in gout, and from the known effect of colchicum for many ages in that disease we have empirical as well as rational proof of its value. Colchicina has never been used in inflammatory rheumatism, but the testimony of thoughtful men is that colchicum is of no service whatever in that disease. From its physiological action we have every right to draw deductions that it will be found of great service in those diseases where uric acid and the urates are in abnormal quantities, and require to be removed from the system.

When speaking of the action of colchicum I told you that objections were raised by some against the use of it in gout, because it seemed to lose its effects in subsequent attacks. Is not this rather the nature of the disease than the want of proper action of the remedy? A first paroxysm of gout is frequently easily controlled in a short time, and by a mild remedy, but each successive paroxysm fixes the diathesis more firmly on the system, until after a time no remedy will cure or cut short the duration of an attack, it only palliates the pain. A certain length of time is required, and a certain amount of abstinence necessary to enable the medicine even to relieve the symptoms; the gout then disappears for a time, and returns again at its regular period. Even in these instances colchicum greatly relieves the severity of the pain, and is necessary before a cure is effected. Another error is frequently committed:—Colchicum, and it alone, without regimen or diet, is depended on, and as it gives relief nothing is administered afterwards to correct the still existing depraved condition; whereas, had proper after treatment been resorted to, the patient would not be left in a condition to find fault with the injurious action of any medicine. One thing is certain, a majority of the cases of gout we meet with are quickly cured by the action of colchicum, and in many other cases it affords great relief from the pain, and is frequently the only medicine capable of giving relief. It is as near a specific in gout as any other medicine in other disorders; but it will be recollected that there are no specifics. Guestenberg demonstrated that colchicina afforded great relief to old and chronic cases.

Antidotes.—It has generally been supposed that tannic acid was an antidote to the poisonous effects of colchicum. Acting upon this view Aschoff administered 15 grains of tannin to a dog to which he had previously given one grain of colchicina; it had no antidotal effects. It will be remembered that I administered 20 grains of tannin in combination with 2 grains of colchicina, and afterwards gave 30 grains more of tannin, and that it had no effect in preventing the action of the poison, or prolonging the life of the animal. From the rapid manner in which colchicina was absorbed by animal charcoal Carter recommends it as an antidote, and if it could be administered immediately I have no doubt that it would be perfectly protective until means could be adopted to remove the whole from the stomach; but unless administered immediately it would be of no effect—because the absorption of the poison is rapid, and it would in no way counteract its action when once absorbed. Magnesia also has been recommended; but Magnesia is very frequently given in large doses with tincture of colchicum, and yet the colchicum produces its peculiar effects. All that can be done is to counteract the effects of the poison, and this I conceive will be most successfully accomplished by full doses of opium, and stimulants, with free diluents.

Doses.—Of the article made by Oberlin, and by myself, about $\frac{1}{20}$th grain should be the maximum dose. I found $\frac{1}{15}$th to $\frac{1}{30}$th to be safe if not too frequently repeated. In these doses it produced promptly its characteristic effects, and had the advantage over any of the crude preparations that it was definite, and did not deteriorate on keeping. It is always difficult to get a good preparation of colchicum, and hard to keep it good. This, when once prepared, does not change, and is definite in its action.

Original Communications.

ON THE IMPROVEMENT OF THE CONDITION OF THE INSANE.

By JOHN B. CHAPIN, M.D.,

BRIGHAM HALL, CANANDAIGUA, N. Y.

In presenting to the readers of the American Medical Times the question which heads this article, the writer is fully aware the subject is by no means a novel one. He cannot hope to offer any suggestions to those members of the profession whose labors in behalf of this unfortunate class demand an honorable recognition in the history of the State provisions for the insane. Yet, if it can be made to appear that this work, auspiciously commenced, is not finished, but may be made more comprehensive, may not the claims of the insane still further engage earnest attention and sympathy?

In the consideration of this subject three inquiries naturally suggest themselves:—

I. What, briefly, are the history and policy of the State in providing for the care and treatment of its insane?

II. What are the present number and condition of the insane in the State, and provision for their treatment and cure?

III. What plans and suggestions for the improvement of the condition of the insane does experience at home or abroad suggest?

In the early history of any State the care of dangerous and violent lunatics devolves, from necessity, upon the public authorities. The law directs the public officer to secure such insane persons from doing violence to life and property, or being a source of public insecurity, by confining them to the limits of a jail or alms-house.

In this simple act we observe the recognition of a duty which the community owes to the individual, and one which it is compelled to perform. Duty, in public life as in private affairs, often suggests a policy, especially where it is founded upon moral obligation towards the individual concerned. Thus, the public conscience, which has been content to perform a duty without a policy, comes to agitate the proposition of combining duty, or obligation, with policy. Growing out of this comes the legitimate result,

the adoption of a practicable plan and policy of relief. In short, all civilized communities, from a recognition of moral obligations to the individual, motives of economy, and sense of security, have projected plans for ameliorating the condition of their insane.

The disposition of the insane in the State of New York has not been unlike the usual one. Confined in almshouses and jails, from necessity and duty, the legislature, in the year 1806, enacted a law making an appropriation to the New York Hospital for a period of fifty years to aid the erection of larger accommodations for their care. The Governors of the Hospital were to be the almoners of this yearly bounty, and we cannot infer the State presumed to do more than foster a benevolent enterprise. It could not, as yet, be said to have instituted a policy. In March, 1836, the act authorizing the erection of a State Lunatic Asylum, at Utica, was passed, and it received patients in January, 1843. It would not be within the scope of any paper, or within the patience of the readers of the Times, to give, in detail, the history of the labor which culminated in the erection of this noble charity, and in the adoption of a line of policy by the State looking to the kindly care and restoration of all insane persons within its limits. Suffice it now to remark that the annals of the profession present no brighter page than that which records its earnest efforts for this result.

The organic law of the State Lunatic Asylum was conceived in a liberal spirit, and, if interpreted according to the philanthropic views of its projectors, public opinion would have tolerated no other arrangements for caring for the insane than well regulated asylums built expressly for the purpose. We need no other assurance of this than the avidity with which the room of the asylum was appropriated. In the third annual report Dr. Brigham stated, "The asylum has been constantly full the past year, and we have been reluctantly compelled to refuse admissions to a considerable number." Applications continued to be refused during following years.

Dr. Benedict, in the tenth report, says:—"Sixty were necessarily refused, and thirty-seven patients were removed to other institutions to make room for those having preference by law. If we can calculate the coming, by the past year (1852), there will have been refused admissions into this institution a number of patients large enough to fill another hospital before it can be built, should its erection be commenced immediately."

Dr. Gray, in the thirteenth report, states that one hundred and sixty-seven applicants were refused admission.

The testimony of the several superintendents has been unanimous, and uniformly to the fact, that the "Institution has been wholly inadequate to the wants of the State."

This subject has not occupied the thought of those only who, brought into such intimate official relation with the insane, were prepared to speak intelligently. Governor Seymour and Governor Clark severally presented it to the Legislature with a recommendation to its favorable consideration. The Superintendents of the Poor, the legal custodians of the insane poor, have memorialized, and Boards of County Supervisors have passed resolutions recommending the Legislature to provide additional hospital accommodations. The Legislature has, repeatedly, had this matter under consideration. A question involving the happiness of so large a body of the inhabitants of the State, could not avoid its notice, pressed upon it from so many official quarters. Official documents have emanated from the Legislature; and, more recently, a committee, composed of senators, engaged for five months, with some intermissions, in investigations into the condition of the insane, presented a report; all recommending proper measures of relief. Bills, framed from time to time to meet the desired end, have received the favorable action of one, and sometimes of both branches of the Legislature, yet have failed, finally, to become laws: and no further provision for the treatment of lunatics has been made.

We have already intimated, if the original law of the Asylum had been executed in a faithful spirit, by public officers, public opinion would have been educated to the necessity of providing for all insane persons in proper asylums. It becomes necessary, however, to notice an important modification of the law relating to the support of indigent persons in the State asylum. During the early history of the Asylum the yearly admissions were large, reaching 428 in 1847, and 424 in 1853. The obvious result, as was to be expected, was the accumulation of a large number of incurables. It was natural to hear this would result in impairing the usefulness of the Asylum. The law disposing of insane persons in indigent circumstances, not paupers, provides for their support in the State Asylum for two years. Under the law before amendment it became a practice with many counties to permit their incurable insane to continue in the Asylum after the expiration of this period, still paying for their support. In 1850 an amendment was procured to this law authorizing the managers in their discretion to cause such a patient to be sent to the county from which he came, whether the county authorities desired the removal or not. Thus, by virtue of public laws, we seemed to authorize a return to the old system which begins and ends with the least possible care of the individual.

The result, if not obvious before this amendment went in force, has become so since. It became evident that the counties must continue to provide for their insane in their own way. Yearly, numbers have been thrown back upon the counties to provide for. Many of the counties have enlarged, but not improved, their accommodations. Many counties have erected receptacles which they call asylums, and, instead of sending their recent cases of insanity to the State Asylum, as by the spirit and letter of the law they are clearly bound to do, retain them at home. In other counties movements are on foot looking to the care and treatment of all the insane within their own county-houses. It seems, now, unless this is prohibited or regulated by positive enactment, that the original policy of caring for the insane will be radically reversed. A construction of the laws is permitted which implies that all there is to be done for the insane is to provide them food, clothing, and shelter; and that this can be accomplished quite as well, in a county poorhouse as in an asylum.

In reviewing the lunacy history of the State our conviction is that no act has been so fraught with disastrous results to the interests of the insane, or more effectually arrested all effects to ameliorate their condition.

Briefly, then, we may say of the insane of the State that prior to the year 1808 no organized asylum for the insane existed in the State, though a few lunatics were provided for in the New York Hospital. The asylum building was completed in 1821. In 1843 the State Lunatic Asylum was opened for patients. The committee which recommended the passage of the law authorizing the erection of the Asylum clearly enunciated what was designed to be the policy of the State in these words. "To correct the evils of the existing system as to pauper lunatics; to discharge that highest of moral and religious duties which devolve upon us as a government and as citizens to relieve the wants of the poor and afflicted; to obey the authoritative mandate of the Ruler of the world; to imitate the example of other nations who we will not confess surpass us either in public spirit or benevolence, we should erect hospitals adequate in number and extent to accommodate all our insane—hospitals provided with all the necessary means and facilities for their safe-keeping, personal comfort, and cure."

Collisions.—Of 2136 persons killed and injured on railways during four years (1857–60), 289 cases were attributable to trespass or suicide, and 111 to accidents at level-crossings. These must be set aside as due to personal carelessness or folly. This would leave only 193 instances of death or injury not attributable to collisions, against 1643 due to this latter cause, or seven-eighths of the whole number.—*Lancet.*

A CASE OF
ULCERATION OF THE STOMACH,
AND RECOVERY, WITH SUBSEQUENT ULCERATION AND PERFORATION OF THE DUODENUM.

By J. KNEELAND, M.D.,
OF SOUTH ONONDAGA, N. Y.

On the 29th of Dec., 1861, I was called to see a lady, aged sixty years, a farmer's wife, mother of six children, who had been about eight weeks under treatment by an "eclectic doctor" for a variety of complaints. I took charge of the case on the 31st of Dec., and found the following symptoms present:—Loathing of food; vomiting and diarrhœa; emaciation and sallowness of the skin, suggestive to the mind of jaundice, but on closer examination seeming like the complexion which usually obtains in some cases of internal cancer, or other organic diseases which impair nutrition and assimilation. The pulse ranged from 100 to 110, and was small; the tongue was not much coated, but creased or furrowed deeply. The chief complaint was of severe pain occurring in paroxysms, worst in the epigastric region in a circumscribed spot, but extending thence through the body into the back and between the shoulders. The stomach was very tender to pressure, and a sense of internal heat was at all times present. The vomiting mostly occurred within an hour or two after eating, and the contents of the stomach were mixed with a glairy, tenacious mucus, sometimes tasteless, and sometimes slightly mixed with bile. At times it was said by her attendants that she had vomited a dark-colored matter resembling strong coffee, and had subsequently passed fæces resembling coffee grounds. I prescribed iced gum-water, pills of nit. silver, morphine, and bread crumb, alternated with bismuth and tannin, and counter-irritation of minute blisters dressed with morphine and starch; also lime water and milk diet. She continued for about ten days without much change; slept a little better at night, and retained some more nourishment, and the bowels by the help of starch and laudanum injections were somewhat checked.

On the night of Jan. 14th she vomited more severely than common, throwing up first a sanious fluid, and afterwards several large coagula. I ordered iced cloths to epigastrium, cold drinks, and gave gallic acid and opium in pill. The hæmorrhage subsided, and did not again recur, but much darkened and partially digested blood was evacuated by stool during the next three days. A tendency to diarrhœa continued until her death, which occurred during the night of Jan. 22d. On the 19th she had a sinking spell, and never fully rallied. She, however, retained full consciousness, and had less pain during the last two days of life. She had vomited so much mucus during former attacks, and her pain had been so severe, that her medical adviser had called her disease "gastrodynia, caused by or attended with catarrh of the stomach." His treatment consisting of blisters and mercurial purgatives, followed by cool bland diet, with morphine and bismuth, had served to bring in check two former attacks which she had suffered from during the past three or four years.

After seeing the case two or three times, the conviction that former ulceration of the stomach, and existing "ulceration of the duodenum, which must soon terminate fatally," became so fixed in my mind, that I asked consent to make a post-mortem examination. On the 23d, twelve hours after death, assisted by Drs. Alfred Hall and Dr. D. W. Burdick, I laid open the abdomen, and found the intestines nearly empty, looking well externally. We proceeded carefully to examine the ovaries and womb; they were free from any traces of diseased action. The right lobe of the liver was adherent by its convex, superior, and anterior surface to the diaphragm, but was separated by the fingers without great force, and its appearance and structure seemed healthy. The gall bladder was two-thirds full of healthy looking bile. Spleen normal. A ligature was placed about the lower end of the œsophagus, and another around the jejunum near its junction with the duodenum, and the stomach, pancreas, and duodenum were then carefully taken out for a more thorough inspection. The stomach seemed small, and was firmly attached posteriorly to the pancreas. The serous covering of the stomach, in front and above, looked healthy. On laying open the viscus by an incision through its anterior aspect, midway between the smaller and larger curvatures, we found its mucous lining of a pale pink color, covered with mucus, and looking healthy, excepting a large oval depression occupying that portion of the organ which rests upon, and in this case was firmly adherent to, the pancreas. This cicatrix was one inch and a quarter in its longest, by one inch in its transverse diameter; its edges were thickened, so that its depth varied from three to five lines; its bottom and edges were whiter than the surrounding mucous membrane. In consequence of the presence of this cicatrix the organ was much diminished in size. I with my fingers and the handle of a scalpel separated the stomach from the pancreas, and found all the coats terminating at the edges of the cavity, and the opening in the stomach became much larger. The puckering of the mucous lining so marked before the separation now disappeared, leaving a hole of two inches and a half in diameter, bound round its edges with a firm band of lymph. The pancreas retained on its anterior surface the flooring of the ulcer bordered by an oval circle of indurated lymph of the same character.

The duodenum had lost by ulceration, commencing half an inch below the pylorus, some two and a half or three inches of its upper third, only a narrow strip of its attachment to the mesentery or its back part remaining. A flap of its peritoneal coat, which covered a part of the ulceration in front, had given way for near an inch in extent, and the edges of this opening were thin, ragged, and sanious. Some minute blood-vessels at its attached edge (to the strip not destroyed) were clogged with coagula, whence, doubtless, came the hæmorrhage which occurred a week before death. There was in the duodenum below the perforation some of the ingesta mixed with mucus and bile. This fact, taken together with the complete emptiness of the stomach, and the diarrhœa which had existed up to a few hours before death, and the other fact that no traces of food or drink were found loose in the body, none having escaped from the perforation, indicates either that the duodenum had lost its normal peristaltic action; or, which is more probable, that the serous coat of the ulcerated part did not give way long before death, and that action in the bowel had then ceased, and as the stomach had emptied itself by vomiting nothing was passed through the pylorus into the opening after it occurred, nor did any regurgitation of the contents of the duodenum occur after complete perforation took place through the peritoneal coat. The ductus communis choledochus had not been disturbed in its functions, its insertion into the duodenum being some distance below the ulceration. There was no softening or abnormal tenderness of the mucous lining of the pylorus, or of the duodenum, below the ulcer; the valvular folds of the lower part of the duodenum, and the upper part of the small intestine, seemed healthy. No signs of disease were found in the colon. The diarrhœa of the last four weeks of life was perhaps a result of the disorganizing process going on in the duodenum. The lungs and heart were inspected, and found healthy in appearance, as they had been in function before death.

The point in this case of great practical value is the well established fact, that organic disease of the stomach, frightfully extensive, and productive of great suffering and impairment of function for months and years, is capable of amelioration, and, in truth, of complete cure. Another point is, How shall we diagnosticate duodenal from gastric disease? This was done in this case, and the diagnosis recorded two weeks before it was confirmed by the autopsy.

BENEFICIAL RESULTS

FROM THE USE OF

MECHANICAL APPLIANCES IN POTT'S DISEASE OF THE SPINE.

ILLUSTRATED WITH CASES.

By JACOB A. WOOD, M.D.,

OF NEW YORK.

(*Continued from page* 122.)

Case III.—The son of Dr. ———, of Madison Co., N.Y., æt. six years and five months, of scrofulous diathesis, first came under treatment for Pott's disease of the spine, Dec. 13, 1859.

The following is an abridged history of the case as communicated by the father.

When about three years and a half old, while complaining somewhat of his back from a previous injury the child fell from a low stool to the floor, injuring the spine so as to render him unable to walk for two days. Upon examination there was observed a slight posterior projection of the sixth dorsal vertebra. Treatment was at once commenced with the blisters and issues near the affected part, internal use of iodide of iron and cod-liver oil, together with special attention to the diet. No means have been left untried, from the commencement of the disease, that would seem to afford the least prospect of relief; but all, apparently, to little or no purpose. The disease steadily progressed, involving one vertebra after another, until two or three above and below the original point of the disease became more or less involved.

The deformity continued to increase, and locomotion was performed only with great difficulty by resting one hand upon the thigh. In this manner he attempted to move about, but could only walk a short distance without lying down or leaning upon some object for the purposes of rest and support. He at this time was subject to frequent and severe paroxysms of pain in the lower extremities with partial loss of muscular power.

Upon examining this case I found the patient much emaciated, feeble, and presenting a bold and extensive posterior projection, as represented in Fig. 1.

Fig. 1.

Fig. 2.

The treatment consisted in the use of mechanical means, the *immediate* effect of which was complete relief from pain and suffering, a more erect position of the patient, and enabling him to walk without resting his hand upon his thigh. During the first three months of the treatment there was an improvement of the general health, strength, and figure of the patient, but with little reduction of the curvature. At the expiration of that time, however, the curvature began to lessen more perceptibly, and has gradually decreased until its size is very much reduced, as seen in Fig. 2, which is a correct outline drawing of the case, taken nearly six months since. For nearly two years the patient has been healthy and robust, and is extremely active.

As in this, so in a large majority of cases of long standing, with a great loss of bony substance, improvement is much more rapid after the case has been under treatment several months.

31 Cooper Institute, March 29, 1862.

Reports of Hospitals.

BELLEVUE HOSPITAL.

ANEURISM OF THE ARCH OF THE AORTA.—RUPTURE INTO THE PERICARDIUM.

Case I.—(Reported by A. N. Brockway, M.D., Senior Assistant.)—John McLaughlin, æt. 33, single, a native of Ireland, laborer, entered Aug. 25, 1860. For the first time, in 1855, he felt a darting pain in the back, near the situation of the left kidney. This passed off and did not return until about a year after, when it continued to recur at intervals, until he entered the hospital; it was then constant, but now and then changing its position. About three months after the patient states that he felt a "squeezing" pain in the left side, which, from his account, seems to have extended beneath the sternum, from a point just above the nipple down to a point a little below the ensiform cartilage, and extending on the left side about four inches. Has had no dyspnœa. When the pain appeared he had vomiting. The medicines administered were anodyne in character. He remained until July last, when he was discharged unrelieved.

He was readmitted Sept. 20, with much the same symptoms. The pain was constant, and much increased when he sat up. There was a small fluctuating tumor over the sixth dorsal vertebra, which disappeared in a few days. This was in the situation of a seton, which was inserted in June. Examination of the chest showed nothing positive, except a loud obstructive murmur at the aortic valves. Can obtain no history of rheumatism. The bowels were regular, and the appetite was good.

About 11 A.M., on the 1st of November, being up to that time in the same condition since admission, the patient was seized with collapse. The pulse was not appreciable at the wrist, but was soon felt feebly on the administration of a little stimulant. He was pallid, and his extremities were cold. Vomiting took place, which was somewhat relieved by bits of ice and hydrocyanic acid. He was tossing his head about, and groaning, as if in great agony. When spoken to loudly he would respond, but would quickly become delirious. On rallying a little he complained of much pain in the head and chest. On the day following (Nov. 2) the vomiting was only occasional; pulse 92, full but weak. Pain in chest, however, continued, cardiac murmur being very distinct. His condition improved until Nov. 5th, when he was able to sit in his chair; pulse 90, regular but weak. He took his meals with the other patients, and was about the ward as usual. About 6 o'clock, as he was eating his supper, he suddenly fell back in his chair with every appearance of being *in articulo mortis*. He became covered with a cold sweat, and the pulse was scarcely appreciable at the wrist. He continued to sink, and died in about twenty minutes after the commencement of the attack.

Autopsy. 19 hours after death.—Rigor mortis well marked. Body well nourished. On opening the thoracic cavity, very firm pleuritic adhesions were found on the side and posterior surface of the right lung. Lungs healthy. The pericardium was distended and of a dark color. On opening the sac it was found to be nearly filled with coagu-

lated blood. The contained clot weighed twelve ounces. A rupture of an aneurism of the aorta was ascertained to have taken place. The rupture was about the size of a crow-quill, and occurred on the right and posterior aspect of the aorta. A small bony plate was situated just at the point of the rupture, and patches of atheromatous deposit were scattered over the surface of the vessel. The aneurismal dilatation was about two inches in breadth, by an inch and a half in depth, and commenced immediately above the origin of the ascending portion of the arch of the aorta. The heart was somewhat hypertrophied and the aortic valves thickened with atheroma; the other valves were normal. Liver healthy. Kidneys much congested, but to the eye gave no evidence of Bright's disease. Brain not examined.

Case II.—(Reported by H. S. Plimpton, M.D., Acting House Physician.)—Catherine M., æt. 33, entered the hospital July 23d. Her general appearance was good. She complained of much dyspnœa, especially after exertion. The heart was very irritable. Physical examination revealed: size of heart, normal; pulse very irregular, and a murmur heard with the first sound, at one time most distinctly at the apex, but afterwards at the base. She kept her bed most of the time. On July 27th, as she was leaving the water-closet, she shrieked and fell upon her face, and after struggling about ten minutes, died. The hands immediately unclenched and the face lost its look of horror.

Autopsy.—On opening the thorax the pericardium was seen filling its middle third. The sac and its contents being removed weighed fourteen ounces. On opening into it a clot of blood was discovered weighing seven ounces, which had an even consistence throughout. The heart was small. The aortic valves normal, but there was slight thickening of the mitral. Near the left coronary artery was a small opening from the pericardium into the substance of the left side of the heart, which would admit a crow's quill. This was found to communicate neither with ventricle nor auricle, but with a small sac lying in such a position that, when filled with blood, it would obstruct the aortic opening. This sac would hold a large hickory nut, and opened into the aorta. Other organs healthy.

Case III.—W. S., æt. 25, single, native of New York. On the 15th November, about midnight, the deceased was sitting in company with others at table. Having finished a cup of coffee he withdrew, smoking a cigar; suddenly he was seen, without any premonition, to fall forward upon his face. He received immediate attention, being supposed to have fallen in a fit. There was no convulsion, change of color in the face, or expression of consciousness. The fingers were tightly clenched for a moment, he drew a few difficult breaths, and gave no further sign of life.

The deceased having been an orderly of Bellevue Hospital for more than a year, during which time he had been, so far as was known, regular in habit, and had made no special complaint of ill-health, his death was entirely unexpected. He was understood to have been, at a previous period, irregular in his habits, and to have suffered from exposure to syphilis. He was only moderately nourished, and his countenance had an unhealthy cast. On inspection of the body after death the cicatrices of primary syphilis were observed.

Autopsy.—Head not examined. Lungs healthy. Pericardium distended, and contained nineteen ounces of blood. The aorta and its valves were the seat of atheroma. There were aneurismal pouches corresponding to each sinus Valsulæ. Two of these were of sufficient size to admit the end of the index finger. The third was larger, and was the seat of the rupture. This aneurism took its origin from the posterior sinus, and was bounded on the right by the descending vena cava, anteriorly by the pulmonary artery. Both these vessels were pressed upon by the aneurism. On the left side it was in relation with the left auricle, and the fissure in the walls of the aneurism was near the appendix auriculæ of the latter. The liver fatty. Kidneys healthy.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, February 26, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

DILATATION AND FATTY DEGENERATION OF THE HEART, DISEASE OF MITRAL AND AORTIC VALVES, EXISTENCE OF THE MITRAL DIRECT MURMUR, ETC.

Dr. Austin Flint presented a heart, and gave the following history:—The specimen was taken from a female patient, aged 30 years, who died in Bellevue Hospital. She had rheumatism five years ago, and for the year or so before her death suffered from dyspnœa on exercise, and when she entered the hospital three weeks ago she experienced a greater frequeney and severity in the paroxysms. These would occur at irregular periods during the day and night, and on several occasions she seemed to be on the point of death.

On examining the heart there were evidences of enlargement in the situation of the apex beat, and in the superficial cardiac region. She presented a loud mitral direct murmur. The existence of this murmur is ignored by some, and by most regarded as extremely rare, but I must confess that I have not found it so unfrequent as one would be led to suppose from such statements. There are now in Bellevue Hospital four cases that present it very well marked. The patient presented also a murmur with the second sound at the base (aortic regurgitation). These murmurs were verified by Dr. O'Sullivan, and a number of other medical gentlemen who saw the case. At times she presented also a systolic murmur. The aortic murmur was also sometimes absent, but the mitral direct was invariably present. She died in a paroxysm of dyspnœa.

Post-mortem examination.—The heart is extremely soft and flabby, and presents the microscopical and gross appearances of fatty degeneration; its weight is twelve ounces. The left ventricle is somewhat dilated, the thickness of its walls at the thickest part being little under the average, three-eighths of an inch; the right ventricle is still more dilated, the thickness of its walls at the thickest part being only three-sixteenths of an inch; both auricles were also dilated. The mitral orifice presents us with considerable contraction; the two curtains are united by their sides, forming the "button-hole slit;" the contraction is such as to admit only the end of my little finger. The aortic valves appear to me to be a little atrophied, though I regret that the water test was not employed, nor measurements taken to prove the point. The question has arisen in my mind whether they might not be sound. I suppose that the slightest insufficiency might produce an aortic regurgitative murmur, but it has occurred to me that it also might be caused by the passage of blood through the contracted mitral orifice, immediately after the ventricular systole, while the auricle was being filled. I would mention that there was a jugular pulsation synchronous with the contraction of the auricle. The right cavities were largely distended with liquid blood and soft dark coagula.

ARACHNOID EFFUSION DEPENDING UPON PNEUMONIA.

Dr. Lewis Smith presented the lungs taken from a female child who died at the age of nine months, being at the time under the care of Dr. Lambert. Nothing unusual was noticed in her condition until she was about five months old, when she began to waste away. The emaciation continued, though she was wet-nursed and treated with great care. About six or eight weeks before her death she was seized with a dry hacking cough. On the 13th or 14th of the present month she was suddenly attacked with tonic spasms; opisthotonos was a prominent feature. These spasms returned on the 20th, and terminated with her life. During the last week or two before her death her breath-

ing was somewhat accelerated, and she was troubled considerably with meteorismus. On the day following her death a post-mortem examination was made:—About an ounce of clear colored serum was found in the arachnoid, and a slight sanguineous effusion was also discovered on the right hemisphere of the cerebrum. The substance of the brain appeared healthy. The mucous membrane of the trachea was slightly vascular. The upper lobe and the posterior portion of the left lung was emphysematous. The posterior portion on the right side was hepatized. Examined under the microscope oil globules and the compound granular cells were found in abundance. The liver was rather small, and almost destitute of oil globules, in fact the hepatic cells contained hardly any. The kidneys were healthy; the mesenteric glands were enlarged, and of light color, but not tuberculous; the heart was healthy, and the ductus arteriosus was closed as usual with a firm plug of fibrine.

The points of interest were, 1st, The serous effusion in the cranial cavity; 2d, The probable dependence of this effusion upon the pneumonia; and 3d, The absence of tuberculous deposit.

Progress of Medical Science.

PREPARED BY DR. P. F. C. DESLANDES.

ON VACCINATION OF INFANTS.

The question raised in the *Société Médicale des Hôpitaux de Paris*, by M. E. Barthes, with relation to the vaccination of children during the first days following birth, has brought out several communications which may assist in its solution.

In a letter dated August 28th, 1861, Dr. Ragaine, of Mortagne (Orne), writes to the *Gazette des Hôpitaux*: "We have practised vaccination of children, young, delicate, thin, and whose skin was so flabby that it was difficult to make it tense enough to introduce the point of a lancet, and yet we never have seen any of these children, whose number reaches at present to four hundred, fall sick a few days after the operation. The oldest of these children was hardly one month old, the others were eight, fifteen, and twenty days old. The vaccine has constantly appeared to us mild and benign in these poor little beings. We have observed neither roseola, nor erysipelas, nor enteritis; the few diarrhœas which have come under our notice may be attributed to other causes than vaccination."

Dr. Barillier, physician to the children's hospital of Bordeaux, differs entirely from Dr. Ragaine, as his letter to the same editor will show. He says:—"I am not partisan of premature vaccination, and the following are my reasons: In the nursing department, which receives the foundlings and indigent children, the regulations impose upon us the obligation of sending to the country, a few days after their admission, the children which are not sick. To conform to this condition we are obliged to vaccinate the children the very next day after their arrival. These children, who have often suffered before their admission (either from want of care or insufficient nursing), present the third or fourth day after their vaccination various symptoms: almost always some fever, and, like M. Blache, my much honored master, I have seen violent inflammations, deep ulcerations, etc., which have sometimes carried away our children in a few days. On the contrary, these accidents are much less frequent in those whom the administration keeps in the hospital, or who, being sick, previous to their entrance, have been vaccinated at a later period. I do not think that in Bordeaux vaccination becomes sometimes indirectly a cause of death, by delaying the removal to the country of the children kept in the hospital, a fact observed by M. Hervieux in Paris. The conditions, it is true, may not be the same in the hospital for children. At Bordeaux the children of the hospital have each an excellent nurse; it was not so in Paris several years ago. I think then that, in hospitals, it is better not to vaccinate children before the second or third month. Another advantage to be derived from this practice is, that it will preserve the country nurses to whom we intrust the children, from syphilitic contagion; for often the manifestations of infantile syphilis are slow (two months). This consideration has always induced me to delay the vaccination of suspected children to the third month, and I always have had reason to be satisfied with this reserve, the more so that variola is very rare before the age of three or four months. An important fact in regard to vaccination is this: At the hospital of Bordeaux, from the month of May to the month of June, 1861, we have not vaccinated one child without seeing this operation followed by erysipelas, often extensive, around the vaccine pustules (eight times has this accident occurred, and two children have died). Three times the vaccine pimple served as starting point to very extensive gangrenous ulcerations, which have carried off our little patient. However, we took care each time to use new vaccine, and derived from a good source. In two cases one single puncture was made on each arm; erysipelas nevertheless made its appearance. (An epidemic reigned then in our wards; we should then abstain from vaccinating during an epidemic of erysipelas.)

The following communication is from Dr. Liégard, of Caen: "About twenty years ago, my friend, Dr. Carting, had only two daughters when his wife was delivered of a little boy, which made him very happy. He intended to wait till he was a month old to vaccinate him, but about the sixth day that child was attacked with a confluent variola, to which he soon fell a victim. The grief of my poor friend, and the reproaches he addressed to himself, made a deep impression upon me, and from that time I have performed this little operation during the eight or ten first days of life, and I never have observed the least accident which might be attributed to this practice. I have done so with my own children; my eldest son was vaccinated the third day after birth. Our learned master, Husson, was also very partial to early vaccination. Some one asked him one day in my presence, at what age he had vaccinated his son. Three hours after birth, replied he. This fact proves what confidence this great practitioner had in early vaccination. His opinion and that of M. Bousquet, which are alike, ought to have a great weight. I will conclude by relating cases which occurred in my own practice:—*Case* 1. On the 3d of May last Madame H. was delivered at half past eight o'clock in the morning, of a strong healthy boy. At noon of the same day I had several children to vaccinate with very fine vaccine taken from the arm of a child fifteen days old, strong and healthy. I seized this opportunity to vaccinate the little boy born three hours and a half before. I made six punctures, which gave six magnificent pustules. *Case* 2.—Eight days after, by a singular coincidence, Mme. V., sister of Mme. H., gave birth at seven o'clock in the morning to a healthy little girl. Four hours after I vaccinated this child with vaccine taken from the arm of her little cousin. I made six punctures, which gave five beautiful pustules. These two children have not been, any more than the others, indisposed in the least, from this early vaccination. The only inconvenience I have observed of vaccination thus practised a few days or a few hours only after birth, is that sometimes, and more particularly in very small and very weak children, the pustules do not make their appearance, and vaccination is to be practised again a little later. In these very puny children I never make more than one puncture in each arm."

(To be Continued.)

Illinois State Medical Society.—The Eleventh Regular Annual Meeting of the Illinois State Medical Society will be held at Jacksonville, commencing on the *first Tuesday* in May, 1862.

American Medical Times.

SATURDAY, APRIL 5, 1862.

OUR MEDICAL SOCIETIES.

The benefits arising from medical societies no right-thinking person can too highly appreciate. In affording a medium for communication between a number of individuals who have interests in common, they unquestionably serve to promulgate and render practical the great truths of our science. Considered also in a social point of view they exercise an obvious influence over the conduct of the profession at large. But notwithstanding the many opportunities for doing good possessed by such bodies, they frequently fall far short of the accomplishment of their true designs. The reason for this lack of usefulness is to be found principally in the scarcity of published proceedings which emanate from them. Our societies throughout the country are very numerous and influential, but with few exceptions their transactions are buried in their individual archives.

The New York Academy of Medicine, to its credit be it said, has taken a desirable stand in this matter, and gives to the medical world, at stated intervals, its papers in the form of Transactions, and its discussions in a well conducted Bulletin. More could not be asked of any scientific body. The N. Y. Pathological Society also is commencing to follow the example, but only in respect to a Bulletin of its proceedings from the commencement of the present year. This step is one that deserves encouragement, and will, undoubtedly, meet with the approbation of every lover of pathological science. But, at the same time, every one must regret that no measures have as yet been taken to give to the public the many valuable papers, and discussions upon them, which are to be found in the memoirs since 1844. This society has, since its establishment, worked faithfully, regularly, and untiringly, and it is fair to suppose that its doings of past years are worthy of no mean place in the literature of pathological anatomy. We hope the society will devise some means by which this vast amount of material may be rendered available.

Of the other smaller societies in New York we hear from them occasionally in the shape of a meagre and isolated report, and yet we have every reason to believe that the proceedings of almost every meeting are worthy of a place upon record. While the scarcity of numbers and pecuniary disabilities might, in these cases, prove an argument against the publication of a volume, it is certainly no index of the enterprise of the body in not furnishing at longer or shorter intervals one well digested report. The publication of its proceedings not only confers a benefit upon the society as a whole, in giving it character, but it exerts a salutary influence upon the individual members in stimulating them to praiseworthy exertions, and insuring on their part an exactness of description and an increased profundity of research. Each member is aware that he is personally accountable for the views he entertains, and he is, consequently, more particular that no hasty assertion shall be made.

Every society advances in usefulness, and subserves the general interest, just in proportion as it confines itself to scientific matters. Too much time is generally occupied in the transaction of ordinary business, and there is often too strong a disposition to transform scientific into legislative bodies. No society in this country can claim to have a legislative character except, perhaps, the American Medical Association, and the Medical Society of the State of New York; the former, a true representative of the opinions of the whole class of American physicians, and the latter the only association endowed with special rights by the state legislature. To these, then, we should be satisfied to leave our legislation, and be content, in our other societies, with only such action as will insure the enforcement of the rules of order. Another thought suggests itself in this connexion, having also reference to the saving of time, and that is, the transaction of all mere business matters only after the scientific discussions are ended. The experience of one of the most learned societies has amply proved the practicability of such a system in rendering its meetings in the highest degree interesting and profitable. Under such circumstances no disposition is shown to enter into discussions of parliamentary usages, neither is there time left for personal quarrels; the executive business is transacted in a summary manner and no one is dissatisfied. Every society, of course, has its particular stumbling-blocks, members who have always something to say on every subject, and who, from their known character for superficiality, empty-headedness, and presumption, are never listened to, and only serve to waste valuable time. If such members would even have propriety enough to speak to the point they might by chance be tolerated, but when they seize every opportunity to become verbose and tedious, supporting crude ideas by worse philosophy, every one learns to dread their rising. We fear no remedy exists for this evil, which, we are sorry to say, is quite rife in our various societies, except, perhaps, a friendly hint to those who are not so lost in their own conceit as not to heed it.

For the past year the various societies in our city have shown a commendable zeal in furthering the cause of science. Before the Academy of Medicine many learned papers have been read and thoroughly discussed, and we deem it our duty here to state that the members of this body are under no small obligation to their President for his indefatigable zeal in thus securing for them such profitable meetings. The Pathological Society has so thoroughly established its character for sound practical investigation that it stands in need of no special commendation. Its meetings have been largely attended, by both students and the profession generally. The various sections of the Academy, particularly the surgical and obstetric, have shown an amount of enterprise that reflects the highest degree of credit upon the energy and hospitality of their respective chairmen. We are glad to see that other sections are beginning to follow their example, and we hope that ere long they will all be in a condition to reflect credit on the renowned parent society. The other medical societies have transacted their usual amount of business, and we may be excused from a separate allusion to each by making the general statement that there has been a greater number of valuable papers read before them during the past year than during any similar time in their own recollection. They are all in good working trim, and with the exception of the few drawbacks to usefulness referred to, we see in them nothing but to praise.

THE WEEK.

A PITIFUL effort was recently made in the Legislature of this State to prevent the publication of the Transactions of the State Medical Society. The Hon. DR. BOWEN, Chairman of the Committee on Medical Societies and Colleges, replied in a happy vein to the remarks of the mover of the proposition. Referring to the volume of transactions for the present year he called attention to some facts our legislators would do well to read, understand, and act upon:—

"Sir, whoever will take the pains to examine the Transactions of the Society for the past year, will there see enough to satisfy him of the progress going on in the Profession for the amelioration of the ills of suffering humanity. He can there glance at the recent improvement so faithfully delineated in the management of fractured limbs; he can there become acquainted with some of the Topographical influences which not only induce certain forms of disease, but have a powerful influence in their modification and duration. He can there learn something of the laws by which sanitary regulations may be governed, which may be vastly useful as a matter of political importance, and as a matter connected with the prosperity of the State, as revealed in the great study of vital statistics."

This is a truthful and well timed recognition of the great value of a knowledge of the medical topography of the State. As a matter of justice the Legislature should engage the State Medical Society to make a complete sanitary survey of the State, as the basis for enlightened legislation in matters pertaining to the improvement of the salubrity of many districts, and its cities and villages. We hope the day is not distant when our representatives must have as the first article of their political catechism, the following proposition, recently laid down by the English statesman, Lord Stanley: "The greatest and the most tangible good that can be conferred upon a people by their rulers is to improve their sanitary condition." In conclusion, the speaker paid the following eloquent tribute to the profession, and his fellow medical members:—

"Mr. Speaker, I forbear in the presence of this House to recount the instances of toil, the self-sacrifice, the devotedness to the requisitions of poor afflicted humanity, as borne by the Medical profession. Your own observation, aye, your own experience by your own hearthstone and within your own household, must have convinced you of this. I call your attention to the fact which cannot have escaped your keen observation, that no class of men on this floor have with more assiduity applied themselves to the sacred behests of those who commissioned them here."

—

THE Metropolitan Health Bill is making good progress through the Legislature of this State, and if it meets with no other opposition than fair argument and legitimate legislative opposition, will certainly become a law. And there never was placed on the statute book a law more wise, more just, and capable of doing an equal amount of good. But mark! directly in its path appears again that omnipotent power, which for three successive years has in some way, we need not tell how, proved its defeat! A morning paper of this city says in last Tuesday's issue:—

"We learn that the employees of the City Inspector's Department were yesterday assessed one month's pay—which in the aggregate is a large sum—ostensibly for the purpose of defeating the new Metropolitan Health Bill, now before the Legislature. It will be remembered that the same department sent Ald. John H. Brady to Albany last year, with $9,000, for the same disinterested object."

The country has this year manifested great interest in the passage of laws for the better regulation of the Health Department of New York city, and large and small towns have memorialized the Legislature to enact needful measures of reform. And well they may, for it is shown that this city daily scatters far and wide the loathsome diseases which bring death to many a country family circle, and desolation to the domestic hearthstone, where health alone would reign were the foul sources of these diseases exterminated from this commercial centre. But let us give our country friends timely warning that their wishes are liable to be defeated by New York gold! Let them mark well the votes which their representatives give against a measure which commands the united support of all the good citizens of this death-ridden city!

—

ONE of the most urgent wants of the profession of this city is a depot where spirituous liquors of a reliable quality can be obtained for medicinal purposes. Heretofore it has been next to impossible to secure on prescription any form of ardent spirits that was not of an inferior quality, if not positively adulterated with the most injurious ingredients. Several of the leading physicians of this city have endeavored to secure an agency here which should supply the profession with at least one article—Bourbon whiskey—of a perfectly reliable quality. They will have done the profession a good service if such proves, as we believe it will, both medicinal and palatable.

Reviews.

COURSE OF LECTURES ON THE PHYSIOLOGY AND PATHOLOGY OF THE CENTRAL NERVOUS SYSTEM, delivered at the Royal College of Surgeons of England, in May, 1858, by E. Brown-Séquard, M.D., F.R.S. 1860. Philadelphia. J. B. Lippincott & Co.

LECTURES ON THE DIAGNOSIS AND TREATMENT OF THE PRINCIPAL FORMS OF PARALYSIS OF THE LOWER EXTREMITIES, by E. Brown-Séquard, M.D., F.R.S. 1861. Philadelphia. J. B. Lippincott & Co.

(*Continued from page* 184.)

THE origin of the sympathetic is partly in the spinal cord, partly in the higher portions of the encephalon, but chiefly in the medulla oblongata and neighboring parts of the encephalon. The vaso-motor nerve fibres, or motor nerve fibres of the sympathetic going to bloodvessels, reach the brain and the cerebellum, passing along the spinal cord, the medulla oblongata, and the pons varolii. Through these fibres is exerted the nervous influence upon nutrition, absorption, and secretion, and besides that action determining the changes in the elements of the tissues. The principal phenomena observed after the section, or the galvanization, as well as the irritation of the sympathetic, may be classed as follows:—Section of the nerve—producing dilatation of blood-vessels, and upon it afflux of blood, with increase of vital properties and of temperature. Galvanization, or irritation of the nerve—producing contraction of blood-vessels, and upon it diminution of blood, with decrease of vital properties and of temperature.

The physiology of the medulla oblongata is considerably elucidated by Dr. Brown-Séquard. The depth of the physiologist is evident in his experiments to prove that this part of the nervous system has been erroneously considered as the focus of life. So, no more mysterious action of the

small amount of grey matter, near the nib of the calamus scriptorius, looked upon by the celebrated Flourens as the *vital knot*, since it may be extirpated without death. Nor has the oblong medulla any exclusive influence on respiratory movements. Vivisections show that they may cease either after removal of the pons varolii alone, or simply of the small origin of the par vagum, the rest of the medulla oblongata being untouched, or after the ablation of the encephalon except the whole medulla oblongata. In animals whose spinal cord is rich in grey matter, and possesses a powerful reflex faculty (alligators, birds, kittens, and puppies), we find respiration persisting after the whole of the encephalon, including the oblong medulla, has been extirpated. Moreover, cases have been observed, of quite destruction of the medulla oblongata, with, however, a more or less free communication between the pons varolii and the spinal cord, in which, nevertheless, respiration continued to take place. Therefore, the respiratory movements depend upon the incito-motory parts of the cerebro-spinal axis, and on the grey matter connecting them with the motor nerves going to the respiratory muscles. According to this theory, the principal cause of respiration is in the lungs, as supposed by Marshall Hall; but excitations coming from all parts of the body, as shown by Volkmann and Vierordt, and also direct irritation of the base of the encephalon and of the spinal cord, almost constantly taking place, contribute to the production of the respiratory movements.

Vertigo, rotatory movements, and other kinds of convulsions may ensue after irritation of the acoustic nerve. The chief cause of rotatory convulsions is often a tonic contraction of some muscles of the neck, though they may also depend upon troubles in the nutrition of certain parts of the brain, from changes in its blood-vessels.

"There is, in some parts of the base of the encephalon, a property of acting in a persistent manner to produce muscular spasms, during and after, even a slight mechanical excitation. These parts are different from those employed in the transmission of sensitive impressions or of the orders of the will to muscles, at least in the medulla oblongata and pons varolii. They constitute a very large portion of those two organs, and perhaps three-fourths of the first one; they are placed chiefly in the lateral and posterior columns of these organs; many of their fibres do not decussate and produce spasms of the corresponding side of the body; they seem to contain most of the vaso-motor nerves, by which directly or through a reflex action, they may act on other parts of the nervous system; they have much to do with the phenomena of several, if not most, of the convulsive diseases; and lastly, the history of their properties and actions throws a great deal of light on the effects of extirpation or diseases of the cerebellum."

It is easy to seize the connexion between these phenomena and the development of epilepsy, artificially produced in animals by Dr. Brown-Séquard, after injuries to the spinal cord. His experiments have led him to assert:

"1st, That the spinal cord in animals may be the *cause* (not the *seat*) of an epileptic affection.

"2d. That there is a mysterious relation between certain parts of the spinal cord and remote parts of the skin of the face and neck.

"3d, That epileptiform convulsions may be the constant consequence of slight irritation upon certain nerves.

"4th, That the trunk of a nerve may not have the power of producing convulsions, whilst its cutaneous ramifications possess this power.

"5th, That even when an epileptiform affection has its primitive *cause* in the nervous centres, some cutaneous filaments of nerves not directly connected with the injured parts of these centres, have a power of producing convulsions, which other nerves, even directly connected with them, have not."

The base of the encephalon, and especially the medulla oblongata, is the most frequent seat of the increase in the reflex excitability, which, together with the loss of control that, in normal conditions, the will possesses over the reflex faculty, constitutes the essential conditions of epilepsy.

The most frequent filiation of the phenomena in this affection may be thus represented:—

Causes.	Effects.
1. Excitation of certain parts of the excito-motory side of the nervous centre.	1. Contraction of blood-vessels of the brain proper and of the face, spasm of some muscles of the eye and face.
2. Contraction of the blood-vessels of the brain proper.	2. Loss of consciousness, and accumulation of blood in the base of the encephalon.
3. Extension of the first excitation, *partly* due to the accumulation of blood in the base of the encephalon.	3. Tonic contraction of the laryngeal, the cervical, and the thoracic expiratory muscles (laryngismus and trachelismus).
4. Contraction of laryngeal and of thoracic expiratory muscles.	4. Crying, and stoppage of respiration.
5. Further extension of the first excitation of the nervous centre.	5. Tonic contraction, extending to most of the muscles of the trunk and limbs.
6. Loss of consciousness, and tonic contraction in the trunk and limbs.	6. Falling.
7. Laryngismus, trachelismus, and the fixed state of the chest.	7. Asphyxia, with obstacles to the return of venous blood from the head, and the spinal cavity.
8. Asphyxia, and the accumulation of black blood in the encephalon, and in the spinal cord.	8. *Clonic convulsions* everywhere; contractions of the bowels, the bladder, the uterus; erection; increase of many secretions; efforts at inspiration.
9. Exhaustion of nervous power generally, and of the reflex faculty especially, except for respiration, which gradually becomes normal.	9. Cessation of the convulsions; coma or heavy sleep, after which extreme fatigue and headache.

Dr. Brown-Séquard insists upon the existence of an *aura* originated from any part of a centripetal nerve, and often unfelt, preceding the fit, even in epilepsy due to encephalic lesion. Application of galvanism to the skin or of ligature on each limb alternately, are the best means of detecting the existence in them of an unfelt aura, by producing in the first instance the fit, which in the second is prevented.

The treatment of epilepsy may be resumed: in preventing the outside irritation to reach the nervous centres, and in modifying their nutrition to forestall their abnormal excitability. Moxas, or cauterization by red hot iron applied to the back of the neck, are successful means for this last purpose.

Dr. Brown-Séquard gives us full example of reflex actions as a fundamental cause of disturbance, not only of secretion and nutrition, but also of functions of the brain and of the whole nervous system. The absence of influence of this latter on any part of the body, is hardly a cause of other alterations of nutrition than atrophy, while the irritation of the nervous system is a most powerful direct or reflex cause of a great many morbid changes in nutrition and secretion.

As regards the troubles in sensibility and motricity it should be observed that, in diseases of the spinal cord, the referring sensations to the periphery of the body (pain, formicatio, prickling, etc.) are a valuable sign of either inflammation in the grey matter or of irritation in the posterior roots. A variable spasmodic flexion of the thighs and legs is likewise peculiar with diseases of the spinal cord. This symptom has not been observed in any disease of the encephalon, the spinal cord being healthy. It was considered by Bellingeri, Valentin, and Oppolzer, as pathogno-

monic of a lesion in the anterior columns of the cord, that of the posterior columns being attended with the spasm of the extensor muscles. The distinction, however, is contradicted by several pathological cases, and in tetanus, when almost always the extensor muscles are chiefly convulsed, the anterior columns of the cord are frequently found altered, instead of the posterior, as it should be according to the above theory.

Anæsthesia and loss of temperature always accompany each other, except in lesion of the brain proper, which might be consequent upon a decussation of vaso-motor nerve fibres above the pons varolii, as otherwise these fibres appear to have little or no crossing in the cerebro-spinal axis. Anæsthesia alone is quite impossible from alteration of the spinal cord. It could ensue only upon longitudinal division on the very median line of the cord, without any other injury—as in longitudinal wounds of the spine, or in spina bifida. Dr. Depaul observed sensibility lost, and voluntary movements partly preserved, in a case of *diplomyelia* (congenital division of the spinal cord). Certainly, diseases of the encephalon, poisoning by lead, belladonna, arsenic, etc., and frequently a morbid reflex action may produce anæsthesia; but with diseases of the spinal cord it is the effect of alteration in the central grey matter. This conclusion seems to hold good also with respect to the loss of each of the various kinds of sensibility.

Correspondence.

THE SPECULUM IN USING THE TAMPON.

[To the Editor of the American Medical Times.]

Sir:—The suggestion of Dr. E. P. Bennet, in regard to the use of the speculum in plugging the vagina to restrain uterine hæmorrhage, is a good one. With a view of giving some additional hints upon the use of the tampon I am induced to cite the following case.

July 23, 1860, was called to see Mrs. B——, æt. 30; has borne four children, and now three months pregnant; she had had a fall followed by slight hæmorrhage at first, which increasing finally brought on severe labor pains. By a digital examination I found the placenta protruding from the os, which I succeeded in removing. The pains and hæmorrhage ceased, and all went well for three weeks, when the patient walked two miles and picked a pail of berries, carrying a child one and a half year of age in her arms. On her return she was taken with alarming uterine hæmorrhage; I was called, found her completely blanched; although of a full habit, fainting from the slightest exertion. I resorted to the various usual remedies for hæmorrhage, such as ergot, lead, tannin, alum, and gallic acid—ice over the uterus, and active stimulants to keep up the strength. As the loss of blood had been so great I resorted at once to the use of the tampon, using sponge and soft rags wet with alum water; but after a few hours the blood would find its way through and around the plug, which would induce me to remove it with a view of adjusting it more perfectly. As might be expected I soon had the external parts in so irritable a state as to prevent my placing the plugs even as perfectly as at first. This state of things continued for three days in spite of all my remedies, medical or mechanical, when it occurred to me to use the speculum in placing my tampon, which I found was a great saving of pain to my patient, and permitted me to press the plug firmly upon the os. I used dry cotton batting, made up into little balls of a proper size to pass readily through the speculum; one after another of these pledgets of cotton was passed through the speculum and pressed firmly upon the os, the speculum being gradually withdrawn as the vagina was filled until it was perfectly packed. (I have since learned to tie the pellets of cotton upon a piece of common wrapping twine some six inches apart, something like the tail of a boy's kite, and then leaving a bit of the twine hanging out by which the whole may be withdrawn). This was permitted to remain until next day: no blood had passed through it. By the aid of the speculum I discovered that the hæmorrhage came from a ragged ulcerated surface covering the anterior and posterior lips, dipping down into, in fact lining, the whole cervical canal, which was patulous and open. Blood was oozing from the whole surface so rapidly as to almost fill the speculum. I applied the solid nitrate of silver thoroughly, and again applied the tampon as before. This treatment was continued for four or five days, the blood never finding its way through the dry cotton; the hæmorrhage, when the tampon was removed, becoming gradually less and less until it entirely ceased.

Yours, etc.,

Samuel Mitchell, M.D.

Cameron Mills, Steuben Co., N.Y.,
March 24, 1862.

Army Medical Intelligence.

SANTA ROSA ISLE.

HEALTH OF THE SIXTH REGIMENT OF N. Y. VOLS.—INTERESTING GUN-SHOT WOUNDS.

[Army Correspondence of the American Medical Times.]

Contrary to general expectation we have found this post, though wanting in incident and interest, very healthy, having lost but four men by disease, during a residence of eight months. Through the Fall our sick report was rather heavy, in consequence of severe picket and fatigue duty; the arrival of the 75th to share our labors, has, however, materially and quickly reduced its bulk, the hospital patients at present numbering thirteen, those in quarters eleven. In comparing the medical statistics of different regiments, an immense want of proportion in their number of sick is immediately observable. This is due to one surgeon registering all his patients both in quarters and hospital, while another records the latter alone. Though we have had a fair share of other diseases, as catarrh, pneumonia, typhoid fever, etc., yet by far the greater number of cases have been dysenteric. These have arisen from causes the most opposite—heat, cold, wet, food, and water. I have tried most of the usual remedies for combating this military scourge, and am convinced that calomel has the strongest claims to our attention, approaching almost to a specific. My method of prescribing this medicine has been in small doses, with or without opium, for from one to three days, and then administering a dose of oil. I have sometimes found it necessary to push this treatment as far as gentle salivation.

After participating in one fight and two bombardments we have had some instances of wounds from fire-arms; the two following appear to me the most interesting:—

I.—On the 1st of January Thomas Moran of Co. I., whilst taking supper, was struck by a piece of shell in the calf of the right leg. When brought to hospital, though a comrade had tied a handkerchief round the limb, he had lost a considerable quantity of blood. There were two openings, one three inches below the knee, and a little to the inside of the median line, the other, and larger one, an inch and a half below the joint, to the outside of the leg. The hæmorrhage proved so troublesome that a free incision was made down to the back wound, which was filled with compressed sponge, and the limb bandaged. For eighteen hours after the receipt of injury both myself and Dr. Benedict, surgeon to the 75th (who afterwards kindly assisted at the operation), detected pulsation in the posterior tibial artery. The patient rallied considerably during the first night, but on the second day he was sinking fast, and the leg having commenced to mortify amputation was decided on. Dr. Pease, surgeon to the regiment, operated at the middle of the thigh, and even there pus was found in the cellular tissue. The man died in an

hour after. On examination the gastrocnemius and soleus were found torn through, the head of the fibula slightly scraped, but no large vessels injured. In this case the holes of exit and entry, though jagged and irregular, were nowhere more than an inch in diameter, no large artery was touched, yet the fatal effects of shell wounds were demonstrated, the muscles being extensively lacerated, and the limb as it were shocked to death.

II.—James Marshall of Co. C., quarrelled with and beat a tent-mate, named Blaney, who, in self-defence, seized his gun (a rifled minié musket). Two comrades tried to wrest the weapon from Blaney, at the same time that Marshall seized it by the barrel; in the scuffle that ensued Blaney discharged the piece, having kept his forefinger on the trigger all the time. The ball cut through Marshall's trowsers, about two and a half inches above the knee, on the outside of the thigh, blackening but not piercing his drawers, and making a slight bruise on the skin beneath. Proceeding downwards it entered the leg two and a half inches below the knee, and passing along the peroneus longus, close beneath the skin, came out between the peroneus brevis and extensor communis. The distance from wound of entry to that of exit was four inches, the latter being three inches in length, appearing like a clean cut, one inch deep. The bullet, after leaving the leg, went through a hard pine plank, one inch thick, and was found scarcely altered in shape, embedded two inches in the sand. From the position the men (who are about the same height) stood in, one having his finger on the trigger, the other hold of the barrel of the gun, it is evident that it could not have been inclined at an angle greater than 120°, according to Blaney's account not so great. Here, contrary to the established course of minié balls, straight through all impediments, we have an instance (the first I believe ever recorded), in which one was deflected by a pair of cotton drawers. Marshall has since progressed very favorably. Some slight suppuration took place along the track of the bullet, and at the wound of exit a little fascia sloughed away, requiring a few poultices. At present, with the aid of straps and water dressing, both wounds have almost entirely healed, and the man will be fit for duty in another week.

EDMUND LYNCH,
Asst. Surgeon, 6th Regt. N. Y. V.

SANTA ROSA ISLE, Feb. 22, 1862.

HEALTH OF TROOPS AT NEW MADRID.

[Army Correspondence of the AMERICAN MEDICAL TIMES.]

NEW MADRID is ours, and like most other towns and places occupied by rebels, and subsequently by our troops, presents some points of interest. In the first place a good portion of the town was burned, and the balance destroyed by the rebels before leaving, and desolation and ruin reign supreme. Our forces, with the exception of a few companies garrisoning the two forts, are encamped two and a half miles from town in an immense cornfield. The country is perfectly level, soil rather sandy, but still enough clay and loam to make it muddy and wet. For the first week after our arrival it rained constantly, and we had no water but surface water, as the enemy prevented our going to the river, and the whole command was greatly troubled with diarrhœa; and as we were obliged to encamp in the mud, without straw or forage to sleep upon, many began to suffer with pneumonia and rheumatism. But the past two weeks the weather has been less wet, each regiment has dug wells, getting a fair supply of water twenty-two feet from surface, and take it altogether the health of the commaud is greatly improved, and at present may be considered good.

I am sorry to say we are still troubled with the old scourge, variola. I have now in my charge seventeen cases, and I have about come to the conclusion that I am the one who is destined to take charge of this pest wherever I go. I had hoped when I left the Upper Missouri, that some other person would have the extreme felicity of ministering to its demands, but the shirt of Nessus is nothing compared to it. I am the victim to look after it still, and suppose I may as well yield quietly. I am very glad to say that thus far I have not lost a case of variola this winter, and hope the good luck will continue. Our loss in killed and wounded on the last day's bombardment, and several skirmishes previously, amounted to about thirty-five. Most of the casualties were the result of shot and shell. One shell took off the right legs of three men, all requiring amputation above the knee. Several were severely injured in the body with pieces of shell, and have since died. The wounds being made by shell and round shot were all very severe. The number killed and since dead is nine; the balance all seem doing well. I send you a morning report which I picked up in a house of the Eleventh Arkansas regiment, stationed at this place in February and March, from which you can judge of the healthfulness of this location. The aggregate force of the regiment was 847, and of this number the morning report of Feb. 9th shows 463 sick, leaving 239 privates for service after the extra duty men are deducted. In proof that this report is correct, I will state that I passed their burying ground of two acres yesterday, and it is planted all over with graves as close as it is possible to dig them.

Yours etc.,

CHARLES H. RAWSON,
Surgeon 5th Iowa Regt. Vols.

CAMP NEAR NEW MADRID, MO., March 20, 1862.

REPORT OF CASES OCCURRING AT THE BATTLE OF ROANOKE ISLAND, VA.

[Army Correspondence of the AMERICAN MEDICAL TIMES.]

HAVING a little time to spare on our passage from Roanoke Island to Newbern, I thought I would employ it in giving you a short history of some of the most interesting surgical cases which have come under my notice at and since the battle at Roanoke Island.

On February 8th, shortly after 8 A.M., the first wounded man was brought from the field; from that time until half past eleven they fell fast, considering the number in action. The regiments composing the brigade to which I am attached were the principal ones engaged, and, unfortunately, one of our surgeons was sick, two were on board the gunboats, and one was wounded at the commencement of the action, leaving me but one surgeon and four assistant surgeons for the entire brigade.

The first case of interest was that of an old man belonging to the 25th Mass. Regt.; his arm was carried away above the elbow by a portion of shell. As soon as he was brought from the field, a small quantity of whiskey was given to him, and he was at once placed under chloroform (in all cases operated upon on the field under my direction that day chloroform was administered, always by a small piece of lint being laid over the nostrils and mouth, one thickness only, and the chloroform dropped on, in no case was there over one drachm used). The arm was amputated by Dr. Derby of the 25th Mass. by the flap operation. The recovery has been perfect, and the man has gone home.

The second case was a Corporal Lawrence of the 51st New York Regt., a man of fine healthy constitution; both his limbs were shattered below the knee. They were immediately amputated just below the joint, one by myself, and the other by Dr. Rivers of the 6th N. H. Regt. This man has gone on recovering without one bad symptom, both stumps united in almost the whole extent by first intention. The operation was circular.

The third was an old man with a gun-shot wound in the knee-joint, passing through the left knee and partly through the right; the bones were badly comminuted, the lower third of femur being in small fragments. I amputated the left limb just above the juncture of lower and middle third

the stump has done well and there has been perfect union. The right leg is still suppurating freely from the opening into the joint, and I fear cannot be saved, but every effort will be made to produce anchylosis of the joint. The surgeon in whose charge he is left has promised to write to me as to his future progress.

I also amputated two lower extremities below the knee, and one arm below the elbow-joint, in each case for gunshot wound, producing compound comminuted fractures, so extensive in character as to forbid all hope of saving the limb; both men who lost their lower limbs have done well, but the young man whose arm I amputated died in forty-eight hours from a grapeshot wound in the bowels, which I did not notice when he was brought off the field.

One young man had the lower jaw fractured by a Minié ball; the ball entered in front of the facial artery on the right side, and passed out behind the artery on the left side. I removed that portion of the jaw between the angles and some splinters from the ascending ramus on left side, leaving as much of the periosteum as possible; he has done extremely well, and gone home on leave of absence. In one case of gunshot wound of the forearm fracturing the radius, Dr. Green of the 24th Mass. exsected the fractured portion of the bone with a most satisfactory result, and this, I think, is the only secondary operation which has been satisfactory in its results. Both of the others mentioned were performed on the field without waiting for any reaction to take place. The patients, since that time, have been placed in a position where it has been impossible to procure fresh provisions, and hence their diet has been very unsatisfactory.

If all the surgeons engaged in the present war will make a note of the cases operated upon on the field, without waiting for any reaction to take place, and those which are defered for secondary operations, it would make a series of valuable statistics for future reference.

If we have any fighting, as we expect, at Newbern, I will send you an account of the wounded.

Yours etc.,

J. H. Thompson,
Brigade Surgeon, U.S.A.

Pamlico Sound, March 12, 1862.

Medical News.

Prospectus of the "New York Annual Medical Register," for 1862.—This volume will contain: Brief notices of all the Medical Societies in this city, giving the date of their foundation and incorporation, their officers and members for the current year, their Presidents, from their organization, when obtainable, the time and places of meeting, fees, dues, etc. The American Medical Association and N. Y. State Medical Society will also be included in the work. A selection of the principal Laws of the State, now in force, specially relating to the practice of Physic and Pharmacy in this city, together with the Code of Ethics of the American Medical Association. The more important data of historical interest connected with the numerous Hospitals, Infirmaries, and Dispensaries of the Metropolis, with present Officers, Trustees, and Medical Staffs, also tabular statements of the leading statistics of each for the past eight or ten years. A short account of the several Medical Schools, with present Officers, Trustees, and Faculties, number of Alumni for each year since the first graduation, names and residences of the graduates in 1861; also the names of the recipients of the prizes annually awarded by those Institutions. The Board of Health for 1862, with lists of former Health Officers, Health Commissioners, Resident Physicians, City Inspectors and Coroners, as far back as procurable. Mortality of the city for 1861, also the ratio of deaths to the population, for quinquennial periods, from 1805 to 1862. Catalogue of all the Medical Works and Periodicals issued from the press in 1861; Medical Booksellers and Publishers; Surgical Instrument, Microscope, Artificial Limb, etc., Makers; Police Surgeons, Physicians connected with Life Insurance Companies, etc. Medical Necrology for 1861. Several papers relative to Medical matters here three quarters of a century since. The design of the Compiler is to give a picture of New York as it is in a Medical point of view, and also to afford a convenient repository for such authentic memorials of the past as may from time to time be furnished him for that purpose, thereby supplying in some measure a desideratum heretofore existing in the Medical Literature of the Empire City. The volume will contain about 120 pages, in 12mo., and will be issued at a price sufficient only to cover the cost of publication. Should the work prove acceptable to the Profession, it is proposed to continue it annually, expanding, modifying, and re-arranging the contents as circumstances may require, in order to render each succeeding number a decided improvement on its predecessor, thus, in the course of a few years, presenting a collection of facts, historical, biographical, and statistical, worthy, perhaps, of being preserved for future reference.

The Late Dr. A. V. Williams.—The following resolutions of the Board of Trustees of the Astor Library render a deserved tribute to the memory of Dr. A. V. Williams, whose useful life and noble traits were so truthfully noticed *in memoriam* by the graceful pen of Dr. Mott, in the last number of the Medical Times:—

At a meeting of the Trustees of the Astor Library, on the 12th day of March, 1862—present, Mr. William B. Astor, President, and Messrs. Daniel Lord, Joseph G. Cogswell, Samuel B. Ruggles, the Reverend Dr. Thomas House Taylor, Mr. James Carson Brevoort, and Dr. Wolcott Gibbs, and his Honor George Opdyke, *ex officio*, Mayor of the city of New York—the following resolutions were unanimously adopted:—

Resolved, That the Trustees of the Astor Library have heard with profound regret of the death of their friend and associate Abraham V. Williams, M.D., whose earnest interest in the welfare of the Library, whose stainless integrity, eminent professional character, clear and comprehensive intellect, and manly and genial bearing, are remembered with honor and affection;

Resolved, That in the death of Dr. Williams the Library has lost a faithful and intelligent guardian, the cause of education an active and earnest advocate, the profession of medicine an eminent and useful member, and society a distinguished ornament;

Resolved, That the Trustees tender to the bereaved family of their friend and colleague the assurance of their sincere and earnest sympathy.

By order of the Board of Trustees the preceding copy of their resolutions is now transmitted to the family of their lamented associate.

March 12, 1862.

Wm. B. Astor.

Samuel B. Ruggles,
Secretary.

Charles H. Rawson, M.D., Surgeon of the 5th Regt. Iowa Vols., has been appointed Brigade Surgeon. This is a well merited honor, both to Dr. Rawson, and the State of Iowa, which he alone represents in this capacity. Dr. R. is an accomplished surgeon, and will bring to the discharge of his more important duties great practical experience.

The *strictest temperance* should be deemed incumbent on every member of the profession; for the practice of both the physician and surgeon, at all times, requires the exercise of a clear and vigorous understanding, and on emergencies, for which no professional man should be unprepared, a steady hand, an acute eye, and an unclouded head, may be essential to the well-being, and even to the life of a fellow-creature. Philip of Macedon reposed with entire confidence and security on the vigilance and attention of his general, Parmenio. In his hours of mirth and conviviality, he was wont to say, "Let us drink, my friends; we may do it with safety, for Parmenio never drinks!" Let us admonish you, gentlemen, to be like Philip's general. For a physician who has confided to his care the lives of many should never drink.—*Prof. Baker's Valedictory.*

MARRIED.

SAWYER—GOOKINS.—In Elkhorn, Wis., Feb. 19, 1862, by Rev. J. B. L. Soule, Dr. S. J. SAWYER, of Raymond, Racine Co., Wis., formerly House Surgeon, 2d Surgical Division, Bellevue Hospital, N. Y. City., to Miss HELEN A. GOOKINS, of Belvidere, Ill.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 24th day of March to the 31st day of March, 1862.

Deaths.—Men, 79; women, 86; boys, 119; girls, 122—total, 406. Adults, 165; children, 241; males, 198; females, 208; colored, 10. Infants under two years of age, 151. Children reported of native parents, 85; foreign, 158.

Among the causes of death we notice:—Apoplexy, 8; Infantile convulsions, 33; croup, 8; diphtheria, 7; scarlet fever, 25; typhus and typhoid fevers, 10; consumption, 58; small-pox, 5; dropsy of head, 17; infantile-marasmus, 22; diarrhœa and dysentery, 0; inflammation of brain, 10; of bowels, 8; of lungs, 29; bronchitis, 7; congestion of brain, 8; of lungs, 11; erysipelas, 3; whooping cough, 11; measles, 0. 231 deaths occurred from acute diseases and 37 from violent causes. 303 were native, and 103 foreign; of whom 64 came from Ireland; 0 died in the Immigrant Institution, and 63 in the City Charities; of whom 10 were in the Believue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Mar. 1862	Barometer.		Temperature.			Difference of dry and wet bulb Thrm.			Wind.	Mean amount of cloud.	Humidity Sat'tion, 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.				
	In.	In	°	°	°	°	°				
22d.	29.44	.21	38	35	41	2	4		N.	8.5	898
23d.	29.50	.10	44	36	51	5	9		NE. to SW.	8	677
24th.	29.64	.15	37	34	50	4	6		S. to N.W.	6	725
25th.	29.36	.30	35	28	42	5	7		N.W.	5	681
26th.	29.91	.14	35	26	45	7	9		N.W.	.04	567
27th.	29 93	.04	39	28	50	8	12		N.W.	2	568
28th.	29 92	.04	39	28	50	8	13		N.W.	1	568

REMARKS.—22d. Light snow A.M.; clear late at night. 23d, Fog early A.M.; clear late at night. 24th, Fog early A.M.; very light rain at intervals; clear late at night. 25th, Wind fresh; clear early and late. 26th, 27th, and 28th, Mostly clear, with blustering wind.

MEDICAL DIARY OF THE WEEK.

Monday, April 7.	NEW YORK HOSPITAL, Dr. Markoe, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M. EYE INFIRMARY, 12 M.
Tuesday, April 8.	NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.
Wednesday, April 9.	NEW YORK HOSPITAL, Dr. Griscom, half-past 1 P.M. BELLEVUE HOSPITAL. Dr. Sayre, Is. Hos., half-past 1 P.M. EYE INFIRMARY, 12 M. PATHOLOGICAL SOCIETY, 8 P.M.
Thursday, April 10.	NEW YORK HOSPITAL, Dr. Markoe, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Elliot, half-past 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.
Friday, April 11.	NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M. EYE INFIRMARY, 12 M.
Saturday, April 12.	NEW YORK HOSPITAL, Dr. Griscom, half-past 1 P.M. BELLEVUE HOSPITAL, Dr. Wood's Clinic, 1 P.M. OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

BELLEVUE HOSPITAL MEDICAL COLLEGE.

ORDER OF LECTURES IN SPRING SESSION, 1862, FOR THE WEEK ENDING APRIL 12.

Monday, PROF. MOTT, 12 M.
Tuesday, PROF. ELLIOT, 12 M.
Wednesday, PROF. SAYRE, at Island Hospital, 2 P.M.
Wednesday, PROF. FLINT, at Island Hospital, 3 P.M., (steamer leaves at 1½ P.M.)
Thursday, PROF. WOOD, 12 M.
Friday, PROF. SMITH, 12 M.
Saturday, PROF. FLINT, JR., 12 M.
Clinical Lectures by PROF. TAYLOR, Thursday, 1½ P.M.
" " by PROF. MCCREADY, Friday, 1½ P.M.

The order of Lectures for the coming week will be published weekly in the AMERICAN MEDICAL TIMES.

SPECIAL NOTICES.

NEW YORK COUNTY MEDICAL SOCIETY.—*The Stated Monthly Meeting of this Society will be held at the College of Physicians and Surgeons, corner of Twenty-third street and Fourth Avenue, on Monday next, 7th inst., at 7½ o'clock P.M. Papers and scientific discussions expected.*

Wm. H. Davol, M.D., late Physician to L. I. College Hospital, Brooklyn, removed to St. Paul, Minn.

References.—C. L. Mitchell, M.D., T. L. Mason, M.D., Prof. E. N. Chapman, M.D., of Brooklyn; Prof. Austin Flint, M.D., Prof. B. F. Barker M.D., of New York.

John W. Shedden, Apothecary, 363 Bowery, cor. 4th St.

Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

P. W. BEDFORD,
PHARMACEUTIST,
REMOVED TO
745 *Sixth Avenue, near Forty-fourth Street,*
Opposite Sixth Avenue Railroad Depot.

American Medical Association.—ANNUAL MEETING.—We, the undersigned, Committee of Arrangements of the American Medical Association, after free consultation with Officers and Members in each important section of the country accessible to the Committee, feel constrained to give notice to the profession, that the regular *Annual Meeting* of the Association is further *postponed* until the first Tuesday in June, 1863.

Committee.—N. S. Davis, J. Bloodgood, G. W. Freer, H. W. Jones, E. Andrews, D. Luskie Miller, Thos. Bevan.

CHICAGO, March 29, 1862.

To Physicians.—Jerome C. Smith, M.D., late of McLean Asylum, near Boston, is prepared to receive into his house, 107 East 39th st., a limited number of Epileptics or Nervous Invalids for care and treatment. He can give them superior accommodations, and command the services of the most approved nurses.

References.—D. Tilden Brown, M.D., Supt. Bloomingdale Asylum, Manhattanville, N. Y. Edward E. Chapin, M.D., Supt. Kings Co. Lunatic Asylum, Flatbush, L. I. Moses H. Ranney, M.D., Supt. N. Y. City Lunatic Asylum, Blackwell's Island. John E. Tyler, M.D., Supt. McLean Asylum, Somerville, Mass. Rev. Wm. Adams, D.D., No. 8 East 24th St.

FINKLE & LYON

Sewing Machine Co.
538 Broadway, New York.

Descriptive Circulars with Samples of Work will be sent mail free.

Having just completed the most successful season's business they have ever enjoyed—wherein they have demonstrated that, *for all kinds of work*, they have "THE SEWING MACHINE OF THE WORLD"—enter upon the New Year with still MORE IMPORTANT IMPROVEMENTS, the latest being their

"NEW TAILORING MACHINE."

Having heretofore aimed almost wholly to supply a Family Machine, which should do all kinds of family sewing, and HAVING SUCCEEDED, we now enter the market with a Manufacturing Machine, which, for elasticity and strength of stitch—for rapid movements—for simplicity and durability, defies competition. While adapted to make the HEAVY ARMY AND NAVY COATS, with linen thread, it can, by a slight change, be made to do the fine family sewing; thus combining in one machine adaptation to FINE FANCY SEWING and HEAVY MANUFACTURING. This can be best appreciated by those who have owned and operated machines. We do not ask or expect the public to be governed by our statements alone. *We court investigation*, and refer to the thousands who have our machines in successful operation.

FINKLE & LYON SEWING MACHINE CO.,
538 Broadway, New York.

Sent Free by Mail on Receipt of Price.

Traite pratique d'Auscultation suivi d'un precis de Percussion, par Barth et Roger. 5e Edit. 12mo. Paris, 1860. $1 50.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians (principally country Physicians) Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important* in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Corunutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bonrbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians destrous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy*.

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Grannle contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyoseiamus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

CLINICAL LECTURE ON ALBUMINURIA,

DELIVERED AT THE NEW YORK HOSPITAL,

By H. D. BULKLEY, M.D.,

PHYSICIAN OF THE HOSPITAL.

PART I.

During the two months now just ending, gentlemen (September and October, 1861), we have had seven cases of albuminuria in our wards, each presenting symptoms and complications more or less peculiar to itself, and all agreeing in illustrating some of the more interesting points of this serious and still but partially understood disease. I propose to give a brief sketch of the leading features of each case, and then to present them to you as a whole, and direct your attention to points both of resemblance and difference.

The first of these cases is that of a female, 24 years of age, who entered the hospital July 6th. She had been leading an irregular life for about three years, during which time she contracted gonorrhœa, and had a bubo, which was followed by rheumatism in the course of about three months. She had been in the habit of drinking until about a year ago, sometimes very freely. About six months before coming here, a dropsical effusion began to affect her body and upper and lower extremities equally. On admission, there was considerable swelling of the whole body. She was weak, but had a moderately good appetite. She was passing from sixty to eighty ounces of urine in twenty-four hours, which was highly albuminous, of specific gravity 1008. No microscopical examination of the urine was then made. She was directed to have dry cups to the back, and to take acetate of potash and infusion of buchu, to which was added, at the end of three days, five grains of chlorate of potash every four hours; and at the end of three days more, eight drops of muriated tincture of iron, three times a day, the potash and buchu being still continued. At the end of eight days more, the quantity of chlorate of potash was increased to fifteen grains, three times a day, with the potash and buchu, and the addition of the hot-air bath. The dropsical swelling now increased very much, and the right arm became red and painful, and the quantity of urine was diminished to fifty ounces in twenty-four hours. The chlorate of potash and hot-air bath were then suspended, and pulv. jalap. co. ordered, and a lotion of acetate of lead and opium for the arm. On the 31st of July, twenty-five days after admission, the dropsical effusion was about the same as when admitted, though the swelling and redness of the arm had nearly disappeared. She was then passing sixty to seventy ounces of urine in twenty-four hours. The acetate of potash and buchu were then resumed, with dry cups to the back twice a week. Ten days afterwards the menses returned, after having ceased for four months.

When first seen by me, on the 2d of September, she was very much swollen, and presented that pale and doughy appearance so characteristic of some forms of this disease. The specific gravity, quantity of urine, and amount of albumen in it, were about the same as when she entered, about two months before. She was now directed to take ten minims of tinct. ferri muriat. and also five grains of chlorate of potash, three times a day, which soon afterwards had to be exchanged for spiritus mindereri, on account of feverish symptoms which supervened; and after the lapse of a few days, she was discharged, at her own request, in about the same condition in which she entered the hospital.

The next case to which I would call your attention is that of a boatman, 24 years of age, born in this city, a well developed man, who entered the hospital September 14. He had been in the habit of drinking more or less for eleven or twelve years, and sometimes to excess, and about six years before had syphilis for the first time, and, subsequently, both gonorrhœa and syphilis three or four times. The notes of his case do not state that he had taken mercury, but he had doubtless taken it one or more times. He first noticed the dropsical swelling a year ago, and says that it extended over all the body. He then went into the Brooklyn City Hospital; and at the end of eight months left there apparently well, and returned to his occupation, but a return of the dropsy soon compelled him again to give up work. About a week before he came here, he had an epileptic attack, during which he had bitten his tongue.

On admission he had a weak pulse and cachectic look, and was quite feeble. His brain worked very slowly and imperfectly, and he found it difficult to remember events, and seemed perfectly indifferent about himself. His pulse was about 80; skin moist; appetite poor; bowels very costive. His tongue was quite sore, and could only be partially protruded. When first seen, his pale and doughy look, the imperfect consciousness, his swollen and bitten tongue, and the fact that he had had dropsy, though none was now present, led me to diagnosticate it as a case of albuminuria, which had given rise to epilepsy, during an attack of which his tongue had suffered. On examination of the urine, it was found to be loaded with albumen, and of the specific gravity 1014. He was directed to have his bowels freely opened with the pulv. jalap. comp., and to take acetate of potash and infusion of buchu. Under this treatment the quantity of urine gradually increased, though no exact note was made of the increase at first; but on the 3d of October (nineteen days after entering the hospital), it had reached the amount of fifty to sixty ounces by measure in twenty-four hours, with rather less but still an abundant quantity of albumen, and some diminution of specific gravity, being 1010 instead of 1014, as at first. He was then directed to take ten minims of tinct. ferri muriat. three times a day, the pulv. jal. comp. to be continued. Soon after this, he began to complain of occasional dimness of vision, objects disappearing from view for a short time, and again suddenly reappearing, and also of occasional slight headache, and of some pain in the back. There was now slight œdema of the right foot. He was directed to take ʒj. of pulv. jalap. comp. every night, and the iron as before. He continued gradually to improve under the use of these means, his strength increasing, and his appetite improving, and the quantity of urine increased at one time to eighty ounces in twenty-four hours; and on the 21st October, thirty-seven days after first seen, it contained but very little albumen, had reached the sp. gravity of 1013, and contained an abundance of phosphates.

The obstinate constipation which continued throughout led to the substitution of the extract of elaterium, of which he took one-eighth of a grain three times a day, with the effect of moving his bowels very freely. Under this action of the bowels, the quantity of urine was reduced to thirty-two ounces in twenty-four hours, of specific gravity of 1016, the albumen at this time constituting about one-fifth of the whole, a proportion very much less than when admitted in the hospital, and it is in this condition we must now take our leave of him.

The third case was in a painter, 29 years of age, who had followed that occupation fifteen years, and whose case presents points of interest. He entered the hospital on the 4th of October. He had had six attacks of lead colic, and had always been treated with mercury, and had been salivated five times out of the six. During one of these attacks he was without a discharge from his bowels for seventeen days. He has been subject to attacks of rheumatism for the last seven years, affecting different parts at different times. He has been in the habit of drinking constantly, but not very freely, for the last ten years, usually gin, brandy, and whiskey. He never had the venereal disease. Has used tobacco by chewing very freely during fifteen years. Bowels are generally constipated,

but has not been troubled with headache, nor palpitation, nor cough. Lungs, heart, and liver, apparently healthy.

On admission into the hospital (Oct. 4), his complexion was pale and doughy; appetite was good; bowels costive; pulse 64, regular. His legs were very much swollen, but there is no record when the swelling commenced. The urine was loaded with albumen, of specific gravity 1008, and of whey color, and abundant in quantity. No microscopical examination was made of it. He was ordered to take one drachm of pulv. jalap. compos. daily for four days. Two days afterwards, when the urine was first measured, he was found to have passed eighty-eight ounces in twenty-four hours; and two days after this, one hundred ounces during the same period, of specific gravity 1009, and containing an abundance of albumen. The bowels had been moved the day before this. Three days later (11th) he was ordered pills containing one-sixteenth of a grain of the strong extract of elaterium, which operated very freely on his bowels.

On the 15th, the swelling had nearly disappeared from his legs, but he was still anæmic in appearance. He was then passing from 100 to 110 ounces of urine in twenty-four hours, which was whey-colored, and which deposited but very little sediment, even after standing twenty-four hours. No casts were then found in it, but a few blood globules, and a moderate quantity of epithelial matter. The albumen was much less abundant than at first, amounting to only about one-sixth of the whole quantity. Specific gravity about 1008.

On the 16th (twelve days after admission), he was ordered the fluid extract of senna, with the ammonio-citrate of iron, and two days afterwards (on the 18th) he only passed twenty-six ounces of urine in twenty-four hours. On the 21st, he passed 40 ounces, specific gravity 1008; on the 25th, eighty-two ounces, specific gravity 1007. Two days after this he was directed to take the ammonio-citrate of iron in the compound tincture of cinchona, and on the 31st (twenty-seven days after admission), the dropsy had all disappeared. His appetite was good, and he felt comparatively well, and at his own request was discharged The quantity of urine at this time was somewhat less than it had been, but still above the normal quantity. It was whey-colored, and contained about one-sixth of albumen. The specific gravity was not noted on that day, but doubtless remained without much, if any, change. Microscopical examination of the urine showed: 1, exudation corpuscles; 2, a few blood corpuscles; 3, fatty casts; 4, torulæ; 5, no salts.

The fourth case is one of interest in several respects. The patient, a seaman, æt. 30, born in England, entered the hospital on the 27th April, 1861. He had had a severe attack of typhus fever about ten years previously, and within three years had had gonorrhœa twice, each attack lasting about two months, and had also had a chancre about a year ago. He never had had any secondary symptoms. It is not stated in the report of his case whether he every took mercury.

The illness which brought him to the hospital began about two weeks previously with loss of appetite, headache, thirst, pain in the epigastric region, etc., of which he complained on admission, at which time his appetite was very poor, his bowels constipated, skin hot and dry. He also had headache, with occasional nausea, and a pulse about 100. Presenting the symptoms of gastric fever, it was treated as such by a cathartic of calomel, followed by laxatives, and afterwards by tonics. Under this treatment the fever left him, and he is reported at the end of three weeks as feeble, with a poor appetite, and with indigestion, which was supposed to be his only trouble, for which he was ordered the compound tincture of gentian. Under the use of this he seemed to have improved, when it was noticed (May 31st) that he was passing a large quantity of urine, nearly 100 ounces in twenty-four hours. On examination of the urine next day, it was found to contain a large quantity of albumen. At the same time he had a healthy look, having a good color of both his face and lips, and saying that he felt nearly as well as he ever did. No mention is made of any dropsical swelling at this time. There was no microscopical examination of the urine. He was now ordered to take five grains of ammonio-citrate of iron three times a day.

Sixteen days after (June 16th), it was noted that both feet had lately become slightly swollen, without any swelling of any other part. In other respects he appears to have been perfectly well, had a good appetite, etc. He was now passing eighty ounces of urine daily, in which there was still an abundance of albumen. Five grains of iodide of potassium were now added to the citrate of iron which he was taking. No apparent change had taken place in the quantity of urine passed, nor in the amount of albumen in it, on the 7th July, about which time seven grains of chlorate of potash, three times a day, were added by the physician then in attendance, to the iodide of potash and citrate of iron, five grains each, which he had been taking. When first seen by me (Sept. 1st), he presented the appearance of a man in good health, with a countenance unusually florid, and complaining of nothing. An estimate of the water passed made it an average of a little over eighty ounces daily for the last three months, and the quantity of albumen seemed to have remained without any perceptible change during the whole of this period. No microscopical examination of it had ever been made.

He then took five grains of chlorate of potash three times daily until Sept. 17, when the urine was found to contain an abundant deposit of the phosphates, without any diminution of the quantity of albumen. Specific gravity not noted. He was now directed to take three drops of nitro-muriatic acid, three times a day, in half an ounce of infusion of gentian. Sixteen days after (Oct. 3), he was found to be passing sixty-eight ounces of urine daily, of specific gravity about 1013, and containing still a large quantity of albumen. On the 15th of October his urine was of a deep yellow color, and turbid, and contained about one-fourth part of albumen by nitric acid, and also contained an abundant deposit of triple phosphates and of amorphous phosphate of lime. It also contained numerous casts, some containing oil-globules, but mostly of the large waxy kind, and some unhealthy epithelium; no free oil-globules were seen. He was now passing forty to fifty ounces of urine daily of the specific gravity of 1015; his general health seemed still good, and he continued to have the same florid complexion; his appetite was good, strength fair; he had no pain in his back, but had still to rise in the night to pass water; the same treatment was continued. At the end of ten days more (Oct. 25), the phosphates had disappeared from the urine, the quantity of which then varied from sixty to seventy ounces daily; general condition the same, and remained unchanged until the last of the month, when I ceased to see him. The quantity of albumen in the urine was then about one-third; no phosphates.

The fifth case is that of a stout muscular man, laborer, a native of Ireland, sixty years of age, who entered the hospital June 14th. General health apparently good; has never been a hard drinker; has had gonorrhœa ten or twelve times, the last time ten years ago; and has had chancres three times, the last time thirty years ago, and bubo once; has been twice slightly salivated, once for a chancre, and once, a few years ago, for diarrhœa, to occasional attacks of which he has been subject for many years, and lasting sometimes several months. He had one of these attacks in 1840 and 1841 and part of 1842, over which medicine appeared to have little or no control; he then spent eight months in this hospital. He has not been troubled with diarrhœa since 1850, and has enjoyed fair health since that time. Four or five months ago he began to suffer from a dull headache, and had also an occasional uncomfortable sensation in the neighborhood of the kidneys, and experienced about the same time a slight loss of sensation and power of motion of the left leg; he was also occasionally troubled with nausea and dimness of vision.

About a month before entering the hospital he noticed that his face and feet began to swell, but cannot tell in which the swelling first commenced. When admitted, his face, arms, and hands were moderately swollen, and the feet very much so; his appetite was poor, his bowels tolerably regular; he was passing between eighty and one hundred ounces of urine daily, of specific gravity 1008, which was found to be very albuminous; no microscopical examination of it was made at the time. He was then ordered to take acetate of potash and decoction of buchu, and at the end of seventeen days (July 1), the report states that his appetite had improved, and that the trouble in the left leg had ceased; he still complained of a dull headache. The specific gravity of the urine remained the same (1008), but the quantity of albumen had diminished very much. The same treatment was continued. Nine days later the quantity of albumen was still less, while the specific gravity remained the same. Seven and a half grains of chlorate of potassa three times a day, were then added to the acetate of potassa and buchu, which he had been taking since his admission. Twelve days later (July 21), it is stated that the albumen had disappeared from the urine for four or five days, and that the specific gravity was 1009, the quantity passed daily being from seventy to ninety ounces; the swelling had also left every part. The chlorate of potassa had been suspended two days before, and he was now ordered a pill three times a day, containing one grain of quinine, two grains of pure iron, and one quarter of a grain of extract of nux vomica, on account of vomiting and loss of appetite for a week. On the 1st of August he was attacked with diarrhœa, which was checked by opium, but which left him rather weak, for which two grains of quinine, three time a day, were ordered. To this was added, twelve days after (Aug. 15), half ounce doses, three times daily, of a solution of ʒj. of dilute phosphoric acid in a pint of water. The phosphoric acid was suspended, August 28, on account of diarrhœa, and opium given, the quinine being still continued.

When he came under my care on the 1st of September, he was passing a large quantity of turbid, whey-colored urine daily, specific gravity varying from 1008 to 1010, but without any albumen in it, by heat or nitric acid. There was no dropsical swelling. He was stout and well developed, and had a marked florid complexion, with a general appearance of good health. Still he did not feel well, and was suffering from a diarrhœa, having four or five stools in twenty-four hours. For this he took opium, and on the 10th of September, the phosphoric acid was resumed, and given of double the strength. He continued with little if any change, except that in the early part of October he complained of a sense of stricture across the upper part of the chest, which was accompanied by a slight mucous expectoration. On the 18th October he resumed the use of chlorate of potassa. At the end of the month he felt quite well, and was discharged at his own request. He then had no dropsical swellings. The urine had contained no albumen for between three and four months. It was still, however, turbid and whey-colored, was of low specific gravity (1008 to 1010), and was passed in quite large quantities. Microscopical examination had detected, at least during October, large pale waxy casts, though no record was made of the exact date; and we have to regret that such examinations were not more frequent, but circumstances rendered the omission of them unavoidable at the proper time.

The sixth case is one which has just entered the hospital, and can only serve us by its history and present condition, as we shall be unable to witness the result of the treatment. He is a native of this city, a shoemaker, 25 years of age, and was admitted on the 29th of October. He is suffering from an injury of the hip, caused by the kick of a horse some years ago, which has given rise to a discharge at times. He had a chancre about ten months ago, which was cured without mercury, by local applications alone. He has been in the habit of drinking freely for the last five years. In March last he had an attack of acute rheumatism, but without any affection of the heart. In May last he first noticed a swelling of his legs, and after this a swelling of the face in the morning, which disappeared after he got up. The swelling afterwards extended to his genitals. He noticed an increased frequency in making water soon after he began to swell. He never had any pain in the back. He has evidently necrosis of the left thigh bone. There are several sinuses which discharge quite freely, and the cicatrices of a few old sinuses, and the left leg is about four inches shorter than the right. His appetite is pretty fair, but he sometimes vomits after a meal. Bowels regular, pulse 92. Complexion pale. Condition of heart natural. There is effusion into the abdomen, and also swelling of the legs and penis. The urine is highly albuminous, the deposit both by heat and nitric acid being from one-third to one-half of the quantity. Specific gravity 1019. There has been no opportunity to ascertain the quantity passed. The microscopic examination, which has been but a partial one, shows an abundant deposit of lithates, and a few crystals of the triple phosphate, but no casts nor blood globules were found in the specimen examined. There was an abundant quantity of penicillum glaucum after the urine had stood thirty hours.

The seventh case was that of a stout German, a carman by occupation, twenty-seven years of age, who entered the hospital on the 19th October. His family have been long-lived. About seven years ago he had dropsy, which lasted thirteen months. He had a chancre two years ago, but it is not stated whether he ever took mercury. About three months after the chancre, he had paralysis of the right side of the face, which lasted three weeks, of which there has been no return.

The day before admission he was attacked with dyspnœa for the first time, for which he was cupped. On admission he was very pale, and had a very poor appetite. Bowels pretty regular; pulse 92. On examining the urine, it was found to contain a large quantity of albumen, and to be of the spec. grav. of 1008.

On examining the heart six days after admission, there were marked signs of pericarditis, double friction sound, extensive præcordial dulness, etc., with considerable dyspnœa. Three days afterwards the friction sound had almost entirely ceased, there was great increase of dyspnœa, and the præcordial dulness had extended very much. His face was swollen, and had a doughy appearance, and he was very weak. Pulse 88. The albumen in the urine was very abundant. He continued to sink, and died on the 19th Oct., fifteen days after admission into the hospital. No autopsy could be obtained.

We have another case now in our wards, presenting some symptoms which led me to look out for Bright's disease, but nothing decisive has been found. A healthy man, about twenty-five years of age, of regular habits, was brought to the hospital some few weeks since in a state of unconsciousness, which was at first attributed to intoxication by alcohol; but when first seen, the symptoms did not correspond with the poisoning from that cause. He was slow in recovering from the stupor in which he was when brought here; and as consciousness returned, it was found that he was paralysed in his lower limbs. When sufficiently restored to give an account of himself, he stated (and there was good reason to place confidence in his statement), that he had not been drinking, at least only very moderately, and that he was struck with entire unconsciousness almost at once. It was then surmised that perhaps he might have taken drugged liquor, but there was no good evidence of this. His mind returned to its normal state very slowly, and he was still slower in recovering the use of his limbs. After some time it was noticed that he was passing large quantities of urine, which was of a whey color, turbid, of low specific gravity, and amounting to 100 to 120 ounces in twenty-four hours, which continued for some weeks. He was in two instances attacked violently with vomiting, the first attack lasting several days, and at last yielding to morphine. The urine was carefully exa-

mined for albumen several times, without finding any, and no casts nor any other evidence of Bright's disease could be detected by the microscope. I call your attention to this case in this connexion, because one writer on the subject of albuminuria mentions the discharge of a large quantity of whey-colored urine as a strong indication of the existence of serious disease of the kidneys.

But we must defer the further consideration of the subject until our next meeting.

Original Communications.

HAS THE BRAIN SUBSTANCE ANY SENSIBILITY?

By GEO. B. WILLSON, M.D.,

THIRD REGIMENT MICHIGAN INFANTRY.

CARPENTER answers this question in the negative. On page 649 of the 1855 American Edition of his *Principles of Human Physiology*, he says:—"Even the substance of the brain and the nerves of special sensation appear to be destitute of this endowment"—sensibility. At page 534 he says:—"All the results of experiment concur to establish the fact that no irritation, either of the vesicular or of the fibrous substance, produces either sensation or motion." He continues:—"These results are borne out by pathological observations in man; for it has been frequently remarked, when it has been necessary to separate protruded portions of the brain from the remainder, that this has given rise to no sensation even in cases in which the mind has been perfectly clear at the time." In several other places he expresses the same opinion, and seems to regard it as a settled fact. I have serious doubts of the reliability of this teaching, and I would like to have an expression on the subject from other observers. It is quite proper that we, as a general thing, admit the teaching of high authority as true, even if it goes contrary to old and cherished opinions; but that feeling of deference should not lead us to disbelieve the positive evidence of our senses on the point, nor should it even be allowed for a moment to deter us from making experiments of our own on the subject whenever opportunity offers. One of the most injurious practices, heretofore in the profession, has been the unreserved acceptation of the dicta of great men as settled dogmata, on which further investigation would be useless: there is no question whatever in medicine that should be so regarded. I do not mean to inculcate habitual scepticism, or advise men to "seek for doubts." It is already too plain to us, that our profession involves so much guessing, that it is our duty to avoid rather than court cavilling at its teachings. It becomes us, however, as scientific students, to avoid dogmatism under every guise.

Entertaining the opinions just enunciated as reliable, I need no further apology for saying that, of late, I have been inclined to question the correctness of Dr. Carpenter's teaching on the subject in hand. My reasons are as follows:—

Last year I reported two cases of severe injury of the brain: one a wound by a circular saw, the other a severe gunshot wound, where considerable (probably six or eight ounces) of brain substance was lost. The saw-cut must have been nearly three inches deep (though its depth was not measured), and some seven or eight inches long, directed across the head, and severing the superior longitudinal sinus. In the report of that case I did not refer to the sensations of the patient while I scooped the sawdust of the skull from the wound with a large grooved director: I will add now that he felt, distinctly, the passage of the director as it was carried from one extremity to the other of the wound. He complained of *pain* only when the instrument scraped against the scalp, but he felt its point down in the bottom of the wound, and several times winced as it passed over particular parts. This case showed that there was sensation—sensibility—but it did not prove an appreciation of its different degrees.

Here let me explain for a moment as to how I regard touch and pain, as contradistinguished from each other. I think they are the same in kind, and differ only in degree. Touch excites sensation, but without any disagreeable feeling. When touch is perceived more acutely it produces uneasiness; and a still keener and finer appreciation of it becomes *pain*. The faculty of touch I therefore regard as one with that which makes us feel pain. Sensibility consists of degrees—one of which is touch, another pain. Where that which would produce pain in some cases is not felt as such, but merely as *touch* or contact, I do not say that sensibility is lost, but only that the power of discerning between different degrees of it is lost, or is wanting, and this I regard as the normal condition of the brain.

In the second case which I reported—that of a severe gunshot wound of the brain, with great destruction of substance—I recounted the experiments made at the time in presence of numerous witnesses. Those experiments proved, conclusively, that in that case, at least, there was a good degree of sensibility in the brain tissue, and in the meninges. I expected that ere this many interested in this subject would either express suspicions as to the exactness of the report, or would at least have had attention called to this apparently anomalous sensibility of the brain: neither was the case, however, and consequently one of my objects in making the report has been rendered futile. I now wish to recall the attention of the reader to those cases, and particularly to the experiments made and reported with the latter. In that case there was very extensive destruction of the cerebral substance, so that some seven or eight ounces of it must have been scooped out in a broken and disorganized condition, thus leaving a large irregular cavity in the wounded hemisphere. Into this cavity I inserted my finger, and moved it about in different directions, and pressed with it first to one and then to the other side, and asked the patient what sensations he experienced. Though he did not complain of *pain*, yet he accurately described the movements of my finger; and, when I left it at rest, could define its locality as well as I could. Then, when I substituted a metallic instrument for my finger, he could and did define the difference of sensation produced, as accurately as if the wound was in any other part of the body. Again, when instead of putting my finger into the cavity within the cerebrum I put it outside on the surface of the brain beneath the skull, in different places, he defined its location exactly. Though he did not complain of pain, but on the contrary said he felt no pain whatever during the experimental operations, yet the sense of touch, as such, appeared to be quite perfect in every part of the brain I examined. And the opening in the skull, as I had enlarged it, permitted not only the introduction of the whole finger, but also a part of the metacarpal bone equal to nearly two inches. It is quite certain that the point of my finger reached quite beyond the anterior inferior edge of the tentorium, and consequently into the most distant part of the cerebrum; from that part to the anterior surface I had ample opportunity of testing the sensibility, and it was as I have described.

I do not say that "one swallow shall make a summer," but I wish to have those cases kept in mind to put with others. It may be that many similar cases have occurred, but, because of their unusual features as compared with the opinions of Carpenter and others, they have been neglected. It is desirable to see how many such cases come up, and whether the evidence from them is to be the rule or the exception.

The instance given by Carpenter, as above cited, of excising parts of the brain, is not worth much if many such cases as I cite occur; because those parts excised were in cases of *hernia cerebri*, and in their excision only the adventitious growth (in all probability) was interfered with. The sensibility of tissues of such rapid growth in any part of the body is generally very imperfect, and that a cerebral hernia

should lack sensibility is no proof or disproof of the sensibility of the cerebrum itself. I would like to have the opinions of others on the subject, but I desire that they should always bear this simple fact in mind—that *absence of sense of pain is not absence of sensibility.*

It may be proper to add that the two cases mentioned are in the third volume of the MEDICAL TIMES, pages 165 and 237.

CASES IN MILITARY SURGERY.

GUNSHOT WOUNDS OF THE ABDOMEN, THORAX, THIGH, ARM, AND HAND.

By WILLIAM O'MEAGHER, M.D.,

SURGEON THIRTY-SEVENTH N. Y. V.

Gunshot Wound of the Intestines—Peritonitis—Death—Autopsy.—John Mallon, private, Company G., 37th N. Y. V., was wounded in a midnight attack on the enemy, at Colchester, Va., on the 27th January, 1862. Though considerably shocked, he was still able to assist his comrades to batter in the door of the house occupied by the enemy, when he sank exhausted. He was thence conveyed on horseback seven miles to the village of Acotink, where I attended him. On examination I found his pulse small, and beating 120 to the minute; his features ghastly, and expressive of profound prostration. Though he suffered severely he was entirely conscious, and able to indicate the wounded part. Stimulants, combined with morphia, were administered at intervals, until reaction and relief were produced, to some extent; meanwhile I was pursuing the examination.

The ball—apparently a large conical one—entered the body at the upper part of the sacro-iliac symphysis, fracturing the posterior superior spinous process, passing inwards obliquely towards the spinal column, being finally lost in the abdominal cavity, wounding the intestines. I had come to this conclusion after a rapid survey of the attending symptoms. With a moderate reaction came restlessness, hiccough, nausea, and pain, referred to the right iliac fossa, in which, guided by his sensations, I presumed the ball had lodged. Repeated examinations, however, failed to discover any evidence of its precise locality. The bladder appeared to be uninjured.

After the removal of a few spicula of bone from the wound, which was closed at the bottom of the psoas muscle, nothing more remained to be done than to close it externally with a light compress of lint and a broad bandage around the hips, stimulants and opiates being repeated at intervals.

Next morning he was conveyed in a field ambulance to the regimental hospital, a further distance of about eight miles, and though the roads were in a most frightful condition, still, by careful driving and adequate assistance, he was brought in alive, and apparently not much worse for his long ride. He was kept constantly under the influence of morphia, and fluid nourishment, together with stimulants. On the third day, symptoms of subacute peritonitis supervened. The narcotic was gradually increased, and emollient anodyne epithems applied to the abdomen, which was becoming tympanitic, but not very painful on pressure. As before stated, the pain was referred mostly to the right iliac fossa.

Under this palliative treatment he grew somewhat better, though the prominent symptoms remained nearly the same, until the eighth day, when a spontaneous natural movement of the bowels took place, inducing a faint hope that perhaps he might recover. But an uncontrollable diarrhœa set in immediately afterwards, the evacuations being very profuse and entirely purulent; obstinate vomiting, incessant hiccough, low delirium, and collapse supervened, and continued until he died on the sixteenth day.

The autopsy, made eight hours afterwards, revealed the following state of things:—The ball had entered the body as before stated, furrowing the psoas muscle, passing over the promontory of the sacrum, against which it was flattened, posteriorly, into the right iliac fossa, wounding the posterior part of the cœcum, about an inch from the appendix, furrowing again the iliacus muscles, thence deflected upwards by the right ilium, wounding the transverse colon, anteriorly, in two places—entrance and exit being about three inches asunder—and was finally discovered between the bladder and rectum. It was a conical rifle ball, weighing nearly one ounce. The intestines were attached in several places to one another, to the abdominal parietes, especially on the right side, and to the omentum, which was distinguishable as a thin membrane, considerably expanded, and in a state of decomposition. Underneath the cœcum was a well of pus, which, together with the other purulent fluids removed from the abdomen, and what was previously passed at stool, would certainly amount to more than a gallon. Fibrinous clots covered the surface of the intestines, in thick, soft, and blackish patches, which were then assuming all the appearances of decomposition. Throughout the entire intestinal tract this was strikingly evident.

This case excited a good deal of interest among the surgeons of the brigade, who look upon it as a very remarkable instance of life prolonged under such disadvantages.

Gunshot Wound of Intestines—Death in Ten Hours.—James McClellan, Co. H, 1st New Jersey Cavalry, while patrolling the Richmond road beyond Pohick Run, in advance of our pickets, about 7 A.M., Feb. 24th, was wounded from an ambuscade, the ball entering the body an inch to the right of the spine, in the vicinity of the kidney, and passing quite through half an inch below the umbilicus. The small intestine was severed completely, the wound extending also to the mesentery, from which profuse hæmorrhage occurred both externally and internally. Shortly afterwards vomiting set in, during which the wounded intestine was in part protruded, indicating the nature of the injury. He was then *in articulo mortis*, and it appeared utterly impossible to do anything more than alleviate his sufferings by morphia, etc. He never rallied, and died at four in the afternoon, while I was in another part of the field to look after a detachment of the regiment who were engaged with the enemy.

Gunshot Wound of Thorax, Lung, Diaphragm, Liver, Vena Cava Ascendens, Stomach, etc.—Death in a few minutes.—Laurence Glynn, private, Co. B., received his death wound on the same day in a skirmish with the enemy, near Colchester, on the Occoquam Creek. He lived only a few minutes. The ball entered the right side of the thorax, fracturing the ninth rib near the angle, wounding the lower border of lung, then passing through the diaphragm, tearing open the liver, the ascending cava, the stomach posteriorly in two places, at the lesser and greater curvatures, the diaphragm again, the left pleuræ, fracturing the tenth rib anteriorly, and finally fracturing both bones of left forearm near the upper third. The heart was found completely empty, while the thorax and abdomen were entirely filled by the resulting hæmorrhage.

Gunshot Wound of Thigh, narrow escape of Femoral Vessels.—Michael Hussey, private, Co. D., was wounded on the evening of the same day, the ball entering the right thigh near the lower angle of Scarpa's space, passing upwards and escaping posteriorly in the gluteal furrow. Very little hæmorrhage occurred, though he walked a considerable distance back to the picket station. A plug of scraped lint was inserted into each opening, and a roller bandage applied, this being kept wet with an evaporating lotion. Next day he was removed to the regimental hospital, and for two weeks following little more was done, except to apply a poultice. By this time he was able to walk about, no bad symptom having occurred to mar his speedy convalescence.

Compound Comminuted Fracture of the Humerus.—Patrick Mullam, private, Co. G., was wounded in the same skirmish in the left arm, in all probability by a bullet from a large revolver, while in the act of reloading his rifle. His arm dropped useless by his side, and it is said the brave fellow wanted to continue fighting, looking around to pick

up the arm, which he had supposed was shot completely off. There was a most extensive compound comminuted fracture of the humerus, at the junction of the upper and middle third, with considerable laceration of the soft parts. The ball passed through the arm posteriorly to the great vessels and nerves, which appeared to be uninjured, though the exit of the wound was large enough to admit a small-sized hand, and entered the body underneath the pectoral muscles, from which it was subsequently removed by incision. He also received two other wounds from small shot in the thumb of same side and instep of right foot, which, however, were not of sufficient importance to cause any anxiety.

Several spicula of bone were removed, pasteboard splints and bandages applied, and the arm placed in a sling. Stimulants and opiates were administered, and next morning he was sufficiently relieved to bear transportation to the regimental hospital. At the second dressing, the wound was cleaned more effectually by a syringe and water, and the fragments of bone brought into position so as to overlap to some extent. This, of course, produced considerable shortening of the arm, but under the circumstances it seemed the only alternative left, inasmuch as operative procedure, especially amputation at the shoulder-joint, or even at the point of fracture, was neither necessary nor desirable. I was guided in this respect as well by common sense as by the favorable opinions of the other surgeons of the Brigade, whose advice I asked freely, and their views, I am happy to say, coincided with my own. The muscles of themselves had contracted, naturally bringing the fractured ends nearly in apposition, so it only remained for me to keep them in that situation by a light splint, a roller bandage round the axis of the arm, and a figure-of-eight bandage so arranged as to support the elbow effectually. An ordinary sling was added, and the whole supported by a small pillow. The only dressing or application was lead and opium wash, the wounds being filled in with shredded lint, and dressed every or every other day. In a short time a slow but steady improvement was manifested, indicated by healthy granulations and free suppuration. His appetite was remarkably good throughout, for besides his usual meals of meat, eggs, and other solids, he drank beef tea, milk punch, egg nog, and other stimulants *ad libitum*.

In about three weeks the external wound closed, and the internal one was gradually filling with granulations. Nothing was now used as dressing but the shredded lint, dry, the bandages being still adjusted, and the splint applied in the manner before stated. He was then sent to the General Hospital at Alexandria, in consequence of the regiment receiving marching orders, but I presume he will recover with a useful arm, in due time, by proper care and attention.

Compound Comminuted Fracture of the Middle and Ring Fingers of Left Hand.—Maurin Walsh, private, Co. D., was shot on the 29th of January, the discharge taking effect in the left hand, fracturing the second and third joints and neighboring phalanges, and lacerating the soft parts considerably. The second joints were entirely destroyed and the others seriously injured. The tops of the fingers were barely held on by the uninjured parts, but, though the phalanges were comminuted, they still preserved a certain amount of continuity sufficient to give a faint hope that the fingers might be saved. Accordingly, the disintegrated portions of bone and loose flesh were removed, splints applied, and a terebinth dressing used for a few days. At first it appeared extremely doubtful whether conservative surgery would acquire any credit from this attempt, but a little more patience on the part of both patient and surgeon brought about the desired result. By repeated and careful manipulation and moulding, so to speak, the fingers gradually resumed their normal shape, and now (March 31st) they are nearly healed up with every prospect of useful fingers, but of course artificial joints.

A similar case occurred shortly afterwards to private Murphy of Co. F., in whom the ball passed through the second joint of right index finger, producing a like wound, but not so severe or dangerous. In a week or so it healed up considerably, with simple water dressing and a splint.

Reports of Hospitals.

BELLEVUE HOSPITAL.

COMPRESSION AND LACERATION OF BRAIN.

ILLUSTRATED WITH CASES.

In no class of diseases do the symptoms so often belie themselves in regard to significance as in injuries of the brain. The various phenomena regarding the condition of the pupil, the occurrence of vomiting, convulsions, etc., claimed as indicative of the existence of particular lesions, have been proved to be, by experience, wholly unreliable; in fact, the autopsy under these circumstances not unfrequently shows the existence of a condition the exact opposite of what had been previously suspected. This being the case, we are forced to admit that a great many relations of cause and effect have to be explained in a somewhat different way than formerly. The following cases will illustrate some of the discrepancies alluded to:—

SERVICE OF DR. STEPHEN SMITH.

Case I.—*Compression of the Brain occasioned by a Blow upon the Skull.* (Reported by Henry M. Lyman, M.D., House Surgeon.)—Mary M., an exceedingly intemperate Irish woman, æt. 35, and married to a soldier, while engaged, October 13th, in celebrating her husband's safe return from the wars, received a fall which produced a small scalp wound half way between the right ear and the spine of the occiput. The next day, at four o'clock P.M., she was brought to the hospital, apparently in a state of intoxication, bleeding profusely from the wound on her head. An emetico-cathartic was administered, and the stomach and bowels were fully relieved by its action. The matter ejected from the stomach exhaled an unmistakable alcoholic odor. Two hours after admission the patient manifested a degree of consciousness—could sit up and answer questions, though with the air of a person still under the influence of liquor. The condition of the pupils and of the pulse was quite natural. At two o'clock the next morning an epileptiform convulsion of the right side took place. From this time convulsions continued to recur every few minutes. At seven o'clock in the morning the convulsions affected the left side principally. At nine o'clock both sides were alike convulsed; there was frothing at the mouth, stertorous breathing, constant oscillation of the head. The pulse was 146, the skin was moist, the pupils were of natural dimensions, and responded sluggishly to the influence of the light. An exploratory incision through the scalp revealed no indication of a fracture of the skull. The patient soon became profoundly comatose, and died at half past eleven o'clock in the evening.

After the completion of the coroner's inquest the cranium was opened, by permission of that functionary. There was no fracture of the skull. The effusion of serous fluid under the arachnoid was abundant, especially at the base of the brain. Upon the surface of the left hemisphere of the brain, directly opposite the point of external injury, was a small clot of blood filling the sulci, and overlying the convolutions of that organ. No other abnormal appearances were remarked.

Case II.—*Undepressed Fracture of the Skull; Concussion; Compression; Death.* (Reported by Dr. H. M. Lyman.)—An unknown man, apparently thirty years of age, was brought to the hospital at seven o'clock A.M., Nov. 23d. At about nine o'clock the previous evening he was seen to fall into an area, whence he was removed to a police station-house. He soon vomited freely, and was placed in a cell; but in the morning, finding that he was stupid and speechless, the officer transported him to the hos-

pital. On admission the patient was placed in bed, with hot bottles at his feet. His skin was moist and cool; his pulse was slow and soft; his respiration was natural, but suggestive of alcoholic potations; his pupils were slightly contracted and sluggish; there was no evidence of paralysis, though the patient was profoundly unconscious. The alimentary canal was thoroughly evacuated without the agency of medicine, otherwise the patient remained without any alteration of symptoms till night. The next morning his pulse was full and rapid, and the left pupil was dilated. The muscles supplied by the facial nerve upon the right side soon exhibited evidence of paralysis. During the course of the afternoon the patient made several attempts to get out of bed; but for the most part of the time he was perfectly comatose and motionless. At four o'clock P.M., he died.

Autopsy, twenty-four hours after death.—The body presented no marks of external injury. The scalp, which had been repeatedly examined before death, was perfectly natural and healthy in appearance, showing no sign of contusion or disease of any kind. On removing the occipito-frontalis muscle the pericranium covering the left parietal bone was somewhat discolored with blood. There was a fissure of the skull, extending horizontally, from a point about one inch above the left ear, three-quarters of the distance to the median line posteriorly, producing a rupture of the posterior branches of the middle meningeal artery. A large clot of blood was interposed between the inner table of the bone and the dura mater beneath the fracture. The membranes of the brain were much congested, and several of the smaller vessels were ruptured at different points upon the surface of the left hemisphere. There was considerable laceration of the superficial cerebral substance, occasioning great extravasation of blood, at the lower and anterior surface of the anterior and middle lobes of the left hemisphere, but without discoloration or softening of the adjacent brain tissue. The left lateral ventricle contained nothing unusual; the right ventricle was completely filled with serous fluid; the choroid plexuses were pale. The right lung was bound by old adhesions to the costal pleura; with this single exception, the thoracic and abdominal organs seemed to be perfectly healthy.

Case III.—*Extravasation of Blood from Blow upon the Head.*—(Reported by B. A. Segur, M.D., House Surgeon.) Terrence Fitzsimmons, æt. 28, single, printer, born in New York, intemperate. Several times during the year past has fallen in paroxysms of convulsions. Nov. 11th.—Found by the police lying on the pavement in an insensible condition. Admitted to Bellevue Hospital at nine A.M.

He had a contused wound on right side, extending upwards one inch from the upper portion of the superciliary ridge, by which the bone was exposed.

Gave no evidence of consciousness. No power of voluntary motion. Slight reflex action followed severe pinching; most on the right side. Pulse full, a little frequent. Respiration heavy, occasionally snoring. Pupils dilated; the right most. In the evening he could take no food. Coma deep. Respiration more rapid. Decubitus dorsal. Bowels tympanitic; responded to injection. Urine retained. 2d day.—Pulse 140, small; respiration 36. Had three convulsive paroxysms, confined to left side. Twenty-five hours after admission death occurred.

Autopsy, 30 hours after death.—Body well nourished. Several slight contusions. Extravasation of blood in the tissues about the scalp wound. Beneath the dura mater, all over the right hemisphere of the brain, was an extravasation of blood. The brain was normal in color and consistence. Bloody serum in the ventricles and at the base of the brain. Fatty degeneration of the liver and kidneys.

(To be Continued.)

Vital Statistics of 1861.—In the year 1861 the births in Great Britain were 802,598, and the deaths 497,624, so that the natural increase was 304,974.—*Brit. Med. Jour.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, February 26, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

(Continued from page 194.)

LARDACEOUS TUMOR OF THE INTESTINE.

Dr. Loomis presented a specimen of tumor of the intestine, removed from a German, 53 years of age, who was admitted into Bellevue Hospital on the 14th of last January. From his history no trace of hereditary predisposition to disease could be traced. The patient stated that he had always been well with the exception of an occasional attack of rheumatism, until five weeks previous to his admission into the hospital. He was then attacked with severe pain in his abdomen, after drinking freely of beer. The pain, which he ascribed to the drink, was constant, and at times it was so severe that it compelled him to go to bed. Most of the time, however, he was able to attend to his business. On his admission he had a pale emaciated appearance; his countenance was anxious; his pulse was feeble, and about 90 per minute; his extremities were disposed to be cold; his skin clammy; and he was extremely weak, though able to walk around his ward. He had lost his appetite entirely, and complained continually of this pain in his abdomen, which was sometimes so severe as to cause him to vomit. A physical examination of his chest revealed a loud systolic murmur, heard with greatest intensity at the apex, and transmitted around the left side, so that behind at the border of the scapula the sound was almost as distinct as in front. The rhythm of the heart was perfect. The abdomen was tumid, and was excessively tender on pressure in each iliac fossa. A tumor was readily detected in the left side, on tracing the outline of which it was found to extend from the lower border of the rib down to the ramus of the pubes, and was about a hand's breadth in width. On examination *per rectum* a tumor was also detected, which seemed to communicate with the one felt through the abdominal walls. The whole abdominal surface was, however, so tender as to render it impossible for a thorough examination to be made. The patient remained in about that condition until the 8th of February, when he was seized with symptoms of acute peritonitis, of which he died in the course of six days after.

Autopsy.—On making the autopsy the pericardium was found firmly adherent to the heart. The heart itself was not much enlarged, though the mitral valves were insufficient. On laying open the abdomen it was found to contain about six quarts of clear light-colored serum. The peritoneum covering the abdominal walls was the seat of a fibrinous-looking deposit about half an inch in thickness. This deposit was also found on the surface of the intestines, and could easily be scraped off with the finger nail. It covered also all the organs which were covered by peritoneum, and were seen upon the under surface of the diaphragm. The greater omentum was filled with this deposit, and was firmly adherent to the abdominal wall by fibrinous bands; this was also the case with the lesser omentum. On raising the descending and transverse colon it was found firmly adherent; and in this situation a tumor was discovered with the following dimensions:—eight inches long, four in width, and four in thickness. On laying open this tumor it was found to present the appearance of raw pork, and when cut into allowed the knife to come directly into the intestine. The tumor seemed to have been developed in the walls of the intestine. A tumor of similar character was found in the rectum. Microscopical examination of the exudation upon the peritoneum showed it to be nothing more than the products of inflammation, while Dr. L. believed the tumor to be cancerous in character. All the other organs of the body were healthy.

Dr. Clark remarked that he had never seen a deposit of lardaceous tissue in the walls of the intestine that contained a cancer cell. He noticed that Dr. Loomis merely expressed a belief that the deposit was cancerous, and it struck him that it was worth while to be quite sure about it, inasmuch as the true lardaceous tissue was simply fibrinous degeneration with an infiltration of serum. He was strongly impressed with that fact early in his microscopical studies. Having prepared some specimens of this tissue, he found that it resembled so strongly sections of the fibrinous tumor of the uterus, that, having a piece of each on a slide, he was often at a loss to determine which belonged to the uterus and which to the intestine. Going on to Boston about this time, he was met with a vast amount of incredulity with regard to such fibrous tissue being what is called cancer of the intestine. Ever since then the fact impressed itself upon his mind that cancer cells were wanting in such tissue. In conclusion he stated that he had never met with such a tumor of the intestine that was half so large.

Dr. Loomis stated that he had not examined any portion of the tumor by the microscope, but Prof. A. Flint, Jr., to whom he gave a small piece, positively affirmed that no cancer cells existed in the mass. Other gentlemen, however, who had examined the specimen, were of a totally different opinion.

INTUSSUSCEPTION OF THE ILEUM.

Dr. Gurdon Buck exhibited a specimen of intussusception of the ileum, and furnished the following history :—The patient was a female infant, four months and one week old, who was nourished both from the breast and spoon, and enjoyed every advantage of good nursing and the most favorable hygienic conditions. The only indisposition she had ever suffered from had been relieved by a single small dose of castor oil. During the day, Feb. 14th, preceding this attack, she was lively and happy, and had an evacuation from the bowels of perfectly healthy appearance. Between ten and eleven o'clock in the evening, as her mother was preparing to retire, she waked out of sleep, screaming apparently from severe pain, and soon vomited the contents of her stomach, and had an evacuation of the bowels. Every soothing measure was employed during the night that an experienced mother could think of. An enema of warm water was administered, and was soon followed by the discharge of a small quantity of ochre-colored, soft, fæcal matter, with a minute streak of blood upon the diaper. She refused the breast, and when the pain seemed most severe would draw up her limbs. No straining or tenesmus accompanied these paroxysms of pain. When first visited the next morning (18th) vomiting still continued at intervals of half an hour to an hour, and was accompanied with a faint cry of suffering, and drawing up of the limbs. A slightly increased warmth of the hands and acceleration of the pulse were observable. The face was placid, and the respiration undisturbed. She now took the breast, and drank with eagerness. The abdomen was supple and not at all distended. A rubefacient poultice was directed to the abdomen, and two small doses of magnesia and bi-carbonate of soda were given at an interval of three hours. At evening a small evacuation from the bowels followed an enema, and the fluid vomited was tinged with yellow and greenish bilious matter. Ordered, ℞. Elix. opii McMunn, gutt. xij.; sacch. alb. p. 3ss.; aquæ camphor. ʒj. To take half a teaspoonful every two or three hours.

19th, morning.—Vomiting still continued, though less frequent; disposed to sleep. Stop the sedative mixture. Ordered hydrarg. c. creta, gr. j., sodæ bicarb., sacch. alb. pulv., ää. gr. ij.: to be repeated in three hours. At evening no evacuation had taken place; the vomiting continued; the fluid ejected from the stomach was of a brownish color. A consultation was held with Dr. Thomas F. Cock late in the evening, and a careful examination of the abdomen made for the purpose of detecting, if possible, the seat of the obstruction of the bowels, the existence of which was suspected from the character of the symptoms. The abdomen, though still supple, was beginning to be somewhat tympanitic. A firm, well defined tumor, was now recognised extending above and below the umbilicus over a space of five or six inches, and to either side of the median line within a space of three or four inches. It was somewhat movable, dull on percussion, and disconnected from the liver and spleen above. While handling it the child winced, and gave signs of uneasiness. This discovery confirmed the suspicion of obstruction.

20th.—Convulsions supervened in the morning, sometimes affecting the face and limbs of one side only, and at other times affecting both sides alike. Hiccough also occasionally accompanied the vomiting. These symptoms continued throughout the day and evening, with intervals of consciousness; no evacuation from the bowels took place. Patient died at midnight, having survived the attack about seventy-two hours. After death a patch of viscid, tough, bloody matter, from the anus, was found upon the diaper.

Post-mortem examination, fourteen hours after decease.—Limbs supple and free from cadaveric rigidity. Abdomen greatly distended. The tumor observed during life could not be distinguished by palpation. The peritoneal cavity being laid open a moderate quantity of bloody serum escaped, and the small intestines alone were brought into view, pale and distended. By displacing them on the right side a portion of large intestine was discovered, fleshy and firm to the feel, and of a dark greyish, livid color; it was found to consist of the cœcum, ascending and right half of the transverse colon, and contained in its cavity the ileum, which had become intussuscepted. The vermiform appendix lay in situ, swollen, and of the color of a clot of blood. No adhesions or exudations of lymph were found on these surfaces. The left half of the transverse colon, and all beyond it to the anus, was pale, empty, and shrunken. On laying open the enlarged portion of colon the intussuscepted ileum was brought into view, livid and gangrenous; its mucous surface, which lay exposed, was coated with a greyish purple exudation of the thickness of the finger nail, easily scraped off, and bringing into view a deep purple surface underneath.

The distal extremity of the intussuscepted gut presented an orifice through which a bougie was passed along its whole length into the ileum above the valve. At least fifteen inches of ileum were estimated as involved in the strangulation. The coats of the large intestine inclosing the incarcerated ileum had undergone no apparent change.

In conclusion Dr. Buck remarked:—This case perhaps is remarkable from the entire absence of any antecedents which could be connected with this attack as a cause; the child being in perfect health up to the time the alarming symptoms were ushered in. The age is that at which it occurs most frequently. In a paper by Dr. Lewis Smith, in which fifty cases are reported, I think more than a quarter occurred between the ages of three and six months. I believe that tenesmus and bloody stools are a frequent accompaniment; they were, however, absent in this instance. There were no exudations upon the viscera, neither were there adhesions, but simply fluid effusions in the cavity of the abdomen.

Dr. Smith stated that in nearly all cases under one year of age antecedent symptoms were unusual.

SCARLET INJECTION OF LARYNX AND TRACHEA IN SCARLATINA. —SUPPOSED CASE OF POISONING BY MISTAKE OF APOTHECARY.

Dr. Finnell presented the larynx and trachea of a girl, four years of age, who died rather suddenly under suspicious circumstances. She came home from school on a Monday, complaining of a sick stomach and headache, and was put to bed. Becoming much worse on the morning of Tuesday a physician was sent for, who wrote two prescriptions, and left directions with the mother as to their

mode of administration. The prescription was so badly written that several druggists were unable to decipher it; at length one was found who professed to be familiar with the handwriting of the physician, and accordingly ventured to put it up. One of the prescriptions read, *Aq. Ammon. ac.* (Liq. Ammon. acetat. being intended), and the apothecary put up in its stead the Aq. Ammonia. It so happened, however, that other ingredients in the mixture neutralized the effects of the alkali. The child grew rapidly worse after taking two or three doses of the medicine, and died on Wednesday night. A scarlet eruption made its appearance on the second day of the disease. The circumstances attending the death of the child were such as to call for an investigation by the coroner, and the post-mortem examination was made by Dr. Finnell. It was then discovered that the child died of scarlet fever, and the only interesting point to him was the occurrence of a scarlet redness of the larynx, trachea, and larger division of the bronchi, which he was not aware belonged to the disease in question. A child in the same family died a day or two afterwards with the same fever.

No other specimens appearing, the society went into executive session.

American Medical Times.

SATURDAY, APRIL 12, 1862.

COMMISSION OF LUNACY.

The Legislature of the State of New York has before it, again, a Bill creating a Lunacy Commission. Such a measure last year passed one branch of the Legislature, but failed in the other through the delinquencies of its professed friends. We took occasion at that time to discuss this subject at considerable length, and, from time to time, articles have appeared in the columns of this journal, from the pens of our ablest writers, setting forth the necessity of the measure. The profession throughout the State are, we believe, alive to the importance of this Commission, and to their urgent appeal to the Legislature is due the consideration which is now given to it. The Medical Society of Oneida County has been especially active in this movement, having had a committee devoted to this object for two years, with Dr. Coventry as its Chairman, whose intelligent efforts in behalf of the insane will prove one of the brightest acts of a life devoted to suffering humanity.

The provisions of the present Bill do not differ from those of the Bill of last year. It provides for the appointment of a Commission of Lunacy, whose duty shall be to visit, at least once in each year, all almshouses, poorhouses, lunatic asylums, and jails, within the State; to keep a record of such visits; to ascertain the number of insane inmates, the methods of treatment, the general condition and wants of such establishments, and to report the same to the Legislature; to investigate and decide upon the question of the alleged insanity of any condemned prisoner who may apply to the Executive for pardon or commutation of sentence; to institute a careful examination into the mental condition of persons held in custody for the commission of any offence, punishable by imprisonment in the State prison or death, who are suspected of being insane, etc., etc.

It will be seen that the duties of such a Commission are neither few nor unimportant. There are in this State upwards of two thousand insane persons confined in almshouses, jails, penitentiaries, who should come under the personal examination of such Commission; many of these unfortunate persons are the victims of the grossest ill-treatment. It seems impossible that, in an age so distinguished for its intelligent treatment of the insane, and in a State so renowned for its judicious philanthropy, the poor lunatic is to be found still bound by chains in a dismal cell, unwashed, uncleansed, and receiving his meagre pittance like the wild beast of the menagerie. Yet such a shocking spectacle may be seen in many an almshouse of this State.

To correct such fearful abuses as these, to rescue a class of simply unfortunate fellow-men from the loathsome dens to which ignorance has consigned them, is one of the chief objects of this proposed Commission. In no other way can the State judiciously and intelligently interpose in behalf of the poor insane, than by creating an intelligent medical Commission charged with this specific duty. The other duties of such a Commission, as above stated, are not less important, though widely different. To act well the part of an expert in the examination of persons alleged to be insane, requires the highest order of talent, with great practical experience derived from the study and treatment of the insane. No mere general practitioner or medical theorist can discharge its delicate and responsible duties satisfactorily. Notwithstanding the high character of English physicians to the insane, not a month has passed since a British statesman said in debate, "medical men knew no more about it (insanity) than other men. During the time he had sat upon the Lunacy Commission, his experience led him to the conclusion that medical men were as ignorant of mental diseases as other men." This opinion was sustained by the Lord Chancellor, who, in a strain of bitter sarcasm, quoted from medical writers on the diagnostics of insanity.

The Bill of last year contemplated the appointment of a single Commissioner for the entire State. This we regarded as a mistake, for the duties are of a character too great and too responsible to be committed to any single person. The following views, which we then expressed, are confirmed by subsequent consultation with prominent members of the profession in different sections of the State, and we commend them to our Legislators:—

"It may reasonably be doubted whether any physician professionally competent for this commissionership would rejoice in the appointment, for the labors it would impose are greater than any one man can fully and properly perform. The Commissioner must not only carefully inspect every almshouse, lunatic asylum, and jail, in the sixty counties of the State, at least once each year, but he must, as his chief concern, attend personally to every case of alleged unsoundness of mind in the thousands of criminals and persons accused of crime, in a state having a population of four millions, and a criminal calendar that is frightful in numbers and enormity. Whatever is done by the proposed Commission should be well done, and doubtless the time of the Commission will be mainly absorbed in its jurisprudential duties. The proper inspection and supervision of our almshouses and jails alone, would require the incessant labors of one commissioner, and with this service should be coupled the duty of thoroughly investigating the condition and numbers of the insane in all sections of the state. Accurate knowledge and statistics based upon such investigations would be of vast importance to the state, and of the greatest benefit to the unfortunate victims of insanity.

Will the Assembly provide for this? Let the nineteenth Section be better defined, and let there be at least three Commissioners appointed."

LABORS AND RESOURCES OF THE MEDICAL DEPARTMENT OF THE ARMY.

Every reader of this journal must have watched with eager and fraternal interest the progress of organization and outfitting in the Medical Department of the army. Less than one year ago that department was, in common with all other branches of the military service, on a peace basis, with a minimum personnel, and the meagre resources which a most rigid economy had forced upon it. The little staff of about one hundred medical officers, scattered from Texas to Oregon, had no surgeons to offer the volunteer regiments as they rushed to the seat of war: indeed, that staff was not sufficiently numerous to furnish the requisite number of administrative officers for the Medical Department of the grand army.

The special session of Congress failed to make any adequate provision for strengthening the medical corps of the regular army, yet left upon its Bureau officers the entire responsibility of preparation, outfit, and control, of a vast corps of volunteer surgeons, and the hospital supplies and administration for more than half a million of soldiers in the field. The tender sympathies of the whole people followed these unseasoned volunteers to their camps, and demanded unusual medical and sanitary care. Even the volunteer surgeons themselves must be instructed in the details of their official duty, while the officers of the War Department were continually receiving advice and suggestions upon questions concerning the hygiene of the troops. The records of the War Office show at how early a period its Medical Bureau was acting in reference to these subjects, and how promptly and cordially it welcomed, and even requested, the cooperation of a Sanitary Commission for preventive and humane ministrations in concert and counsel with the regular medical service.

In the brief period of eight months some twelve hundred volunteer surgeons from civil life were sent into the field with the military forces, and with them came new and large demands upon the regular staff and its central Bureau. Not only were hospital supplies and official supervision to be provided for this volunteer corps, but, as we humbly conceive, it became the duty of the regular staff, and especially of its acknowledged official head, to furnish every volunteer surgeon with specific and friendly instructions and advice upon the leading subjects of his official duties as the medical and sanitary officer of his regiment. To what extent this duty has hitherto been discharged by the chief of the Bureau we are not informed, but there is reason to fear that this most important matter has been inadvertently neglected. We know, however, that the Purveyor-General in this city, and some of the Medical Directors, have not neglected to render themselves useful in this respect. And upon every hand we have received similar testimony respecting the personal labors of Dr. Wood and Dr. Edwards, the chief assistants at the Surgeon-General's office. We know that hundreds of the volunteer surgeons feel deeply grateful for the friendly aid they have received from these and other experienced staff officers. But we cannot forbear to express our strong convictions that the Surgeon-General should prepare or cause to be prepared a series of suggestive hints and instructions upon various practical questions, and issue them as special orders, or as official advice, to the medical corps of the army. In this manner the medical officers in the field might receive the most important suggestions and information concerning camp and hospital hygiene, the management or prevention of pestilent diseases, and the applications of knowledge of medical topography in the regions to be traversed or occupied by the forces. The management of ambulances for the wounded upon the field, with special advice to surgeons, would also be of practical value to the volunteer corps. Such duties should not be, in fact they cannot be, transferred to the Sanitary Commission. The medical monographs or epitomes, for surgeons in the field, that have been published by that Commission, are truly valuable: and they serve to illustrate the ability of special instructions furnished to the military surgeon in active service. But there are some points connected with regimental and hospital service which will not be properly heeded without an authoritative official communication or order, and there are many more in reference to which the highest and most experienced official counsel is needed by men who have not previously seen military service.

We would not be officious, but as journalists we have here expressed what we know to be the intelligent opinion of our brethren in the army; and we cannot doubt that the acting Surgeon-General would respond to this wish for special and advisory orders and communications from his Bureau, if himself and assistants were not already overworked. Had the late Chief of the Bureau, by such means and by expressions of active sympathy with the entire corps, declared his independence of needless restrictions of *system* and *precedent*, prejudice and enmity would have waged a harmless warfare against him.

In stating the fact, that the Medical Staff and Bureau officers are overworked, we touch upon what appears to be one of the great deficits of the Medical Department of the Army. There is a deficiency in the numerical force of the Department both in field and bureau or administrative service; and to our own mind there appears to be an imperfect and insufficient *division of labor*. Every Medical Director is overworked, and utterly unable properly to attend to his inspectorial duties; and the Surgeon-General and his assistants are cruelly hampered by merely clerical duties, while the supply of the medical force for the regimental and hospital service is utterly insufficient for the active campaign upon which the Grand Army has now entered. We believe it to be the policy of Dr. Wood, the present Surgeon-General, to permit no lack of service and supplies to the sick and wounded, though "red-tape" be torn to tatters; yet there appears to be a necessity for enlarging the powers of the central Bureau, and augmenting the administrative and inspectorial force in the Staff. Until such enlargement by legislation, we know that the profession and the people will both demand and sustain any effective measures of the Surgeon-General for supplying the medical and sanitary wants of the Army.

Having been at some pains to ascertain what is the actual state of the military hospitals and forces in respect of the official force and the medical supplies, these statements are based upon what we know to be true. And if the columns of this journal have fearlessly criticised and suggested, they have also endeavored to be scrupulously

just in all that relates to the Army Medical Service, and the sentiments and wishes of the profession and the people respecting that. As we all know, the idea of *sufficiency* of men and means, and the utmost *effectiveness* in the sanitary and medical care of the forces, is the very embodiment of these patriotic and humane sentiments and desires. It is due alike to the public and the Medical Bureau, that full and frequent information should be given concerning the operations and supplies of the Medical Department of the army. Not only would such information tend to keep alive the fraternal sympathies of the profession, but it would most effectually silence the carping and misrepresentations that have been unworthily indulged in by multitudes of persons both good and bad.

Though we are but partially informed upon the points here referred to, we believe our readers will be agreeably surprised when they learn some of the facts respecting the preparations and supplies already provided for the medical care of the army.

First.—As regards the augmentation of medical forces for field and hospital service, we have ascertained that in the State of Tennessee and Kentucky alone, with an army of about 170,000 men, nearly one hundred civilian surgeons have been added to the Medical Corps, and that these are the very best young surgeons that could be engaged. Other divisions of the Army are being supplied in a similar manner.

Second.—In respect of surgical equipment and hospital supplies, the Purveyor-General has quietly and steadily been accumulating every requisite supply for the prospective necessities of the sick and wounded, until he has, by authority of the Surgeon-General, made the Medical Bureau the monopolist of the more important articles of such supplies; while at the same time some twelve hundred surgeons have received an ample outfit of instruments, etc., and liberal supplies have been furnished for upwards of half a million of troops. It is true that there have been defects in the medical supplies at particular points, but such defects resulted from the incompetency or derelictions of Medical Directors at those places, or from lack of instructions and orders from higher authority. But in this matter we know that the faithfulness and promptitude of the Medical Department have far exceeded those of the higher military powers. For example: the hospital supplies that were ordered for General Patterson's Division in Northern Virginia, early in summer, were promptly placed at Frederick, Md., in time to anticipate the casualties of the battle which General Scott had ordered to be given; supplies for five hundred beds were in place days previous to the anticipated movement. So upon the peninsula between the York and James Rivers we know that hospital supplies were promptly placed within five days of the requisition, and in season to meet the largest army that has ever been concentrated in a single movement upon the Western Continent.

To Cairo, Louisville, Port Royal, the mouth of the Mississippi, and elsewhere, ample supplies of medicine, etc., have been sent, including a thousand ounces of quinine to each grand base of operations. And yet the supplies at the Purveyor-General's command are not sensibly diminished; and we are happy to state that, of our own personal knowledge, the resources of the Purveyor's department, in all the more important elements of hospital supplies, far exceed any estimate of Army Regulations. Of the single article of quinine the supply actually in possession and reserve is nearly if not quite equal to the demands of a twelve months' campaign for the entire army.

All this is as it should be, and demonstrates the ability and foresight of some of the older military medical officers. We refer to the subject with unfeigned pleasure, and we would assure the officers of the Medical Bureau, that the hearts and hands of the noblest and the ablest of their professional brethren in civil life are ready and anxious to lend any aid that may be demanded of them or desired in the hospitals or upon the field.

THE WEEK.

We are glad to notice that the charges of cruelty made against Surgeon Porter of the Alexandria Hospital, are found, on thorough investigation, to be without foundation. The court of inquiry made the following return:—

"The Court finds that the conduct of Dr. John B. Porter towards the patients has been distinguished by kindness and consideration for the wants of the sick; that no complaint has ever been made of Dr. Porter, except in one instance, by the principal complainant, to Col. Mansfield, and that, according to his own evidence, it was immediately corrected. The Court, from its own observation, cannot speak too highly of the condition of the Mansion Hospital, which is exhibited in the fact that out of five thousand patients there have been but thirty-two deaths."

—

The Secretary of War has authorized the Surgeon-General of New York, under the direction of the Governor, to organize a volunteer corps of Surgeons to render medical aid when requested. A similar organization has been made under the Governor of Pennsylvania, and valuable services were rendered by Dr. Smith, Surgeon-General of that State, and his assistants, to the wounded at Winchester. We learn that Surgeon-General Vanderpoel, of this State, promptly organized a corps of Surgeons, embracing some of the most eminent men in different sections, who will hold themselves in readiness to leave for the seat of war at a moment's notice.

—

A foreign medical journal has recently complimented the profession of this country on the enthusiasm with which they have maintained their medical societies, and the scientific character of their discussions, as if undisturbed by a civil war. This remark will prove true of all our medical organizations, but the American Medical Association, which will be an exception. The annual meeting of this body has been adjourned by the resident committee of Chicago to June, 1863. The committee state that they have consulted leading members in each important section of the country, and are brought to the conclusion that the meeting should be further postponed. They have thus done their duty, and we trust the future will prove the wisdom of their decision. Our own opinion of the propriety of this postponement is unchanged. No valid reason has yet been given why this most important of all our medical societies should not hold its annual meeting. If the probable attendance is always to decide whether or not the annual meeting shall be held, the Association had better be adjourned *sine die*. The fact that our Southern brethren cannot meet with us doubtless has weight with some, but it certainly has none with us. We regard the Association as our National Medical Congress, existing independently of all social and political fluctuations, and exercising juris-

diction over all its members, whether present or absent. The meeting in June would have been one of the most interesting ever held; valuable papers were in course of preparation to be submitted, which will now seek other channels of publication, and important questions growing out of the new relations of the profession to the public service would have received that consideration which they require for their proper adjudication. What is perhaps most to be deplored by this long interval, will be the diminution of that moral force which the Association had at length acquired over the profession, and only after years of persistent effort. Other national scientific associations, as the Dental, Pharmaceutical, etc., we are glad to notice, are to have their annual meetings.

—

The following order relieving Dr. C. A. Finlay of duty as the Surgeon-General of the army has been issued by the Secretary of War:

"SPECIAL ORDERS—No. 71.

"War Department, Adjutant General's Office, Washington, April 3, 1862.

"* * * "Surgeon General C. A. Finlay will repair to Boston, Massachusetts, and there await further orders. Surgeon R. C. Wood, United States Army, will take charge of the Surgeon-General's office. * * * *

"By order of the Secretary of War.

"L. Thomas, Adjutant-General."

No reasons are officially assigned for this change. We think it is safe to presume that the Secretary of War has simply put into operation the rule of "*selection versus succession.*" The report of disloyalty is a fabrication without a shadow of foundation; whatever may have been alleged against his administration of the Medical Bureau, the late Surgeon-General was a devoted and loyal officer. Facts well known to us fully warrant the opinion that when the final history of the present medical staff is written, it will be seen that the senior members of that corps have displayed a liberality, loyalty, and devotion to the welfare of the army and its medical service, that may well be imitated by younger and more aspiring officers. The selection of the veteran officer, Dr. R. C. Wood, for the position of chief of the Bureau, is justly expressive of the large confidence and esteem which that excellent representative of his staff has always and everywhere commanded. There will be no strife for pre-eminence among such men as Finlay, Satterlee, and Wood. Whoever is chief in authority at the Bureau, we beg him to select and detail "the right man for the right place" wherever administrative and directoral duties are to be performed.

Reviews.

Course of Lectures on the Physiology and Pathology of the Central Nervous System, delivered at the Royal College of Surgeons of England, in May, 1858, by E. Brown-Séquard, M.D., F.R.S. 1860. Philadelphia. J. B. Lippincott & Co.

Lectures on the Diagnosis and Treatment of the Principal Forms of Paralysis of the Lower Extremities, by E. Brown-Séquard, M.D., F.R.S. 1861. Philadelphia. J. B. Lippincott & Co.

(*Continued from page* 198)

No anæsthesia is associated with any lesion limited to either of the white columns of the spinal cord. Confined to one side of the body, anæsthesia in spinal diseases is a symptom of alteration in the grey matter of the opposite half of the cord, or all along the posterior grey horns in which the posterior roots pass before going to the other parts of the cord. In such a case sensibility might exist below and above the regions injured: not an instance of this kind, however, has been observed.

Anæsthesia in a limited part of the body, whether alone or with paralysis of movement, cannot be a sign of any other local spinal affection than a lesion, either in the posterior grey horns, destroying the posterior roots at their place of entrance, or in the centre of the grey matter involving the decussation of the sensitive conductors: as in central softening of the cord, in spina bifida with hydrorachis, in diplomyelia.

Hyperæsthesia, contrary to anæsthesia, may exist alone, and is a constant result of lesion in the posterior parts of the cerebro-spinal axis, from the tubercula quadrigemina down to the lower end of the spinal cord. It almost always co-exists with an increased temperature.

Paralysis of movement is not an essential symptom of alteration in the posterior columns, but of:—

1°. A lesion of the anterior columns, everywhere except in the upper part of the spinal cord, near the medulla oblongata.

2°. A lesion of the lateral columns near their decussation at the upper part of the spinal cord, and, perhaps, not in the other parts of the organ.

3°. A lesion of the whole central part of the grey matter.

The symptoms in the trunk and limbs according to the seat of a lesion in one lateral half of the cerebro-spinal axis, are:—

1. Lesion in the brain proper, the optic thalamus, or the corpus striatum.

On the opposite side	*On the same side*
Anæsthesia	Normal sensibility
Paralysis of movement	Normal movements
Increased temperature (even without fever).	Normal temperature.

2. Lesion of the pons varolii, or the medulla oblongata, above the decussation of the anterior pyramids.

On the opposite side	*On the same side*
Anæsthesia	Hyperæsthesia
Paralysis of movement	Normal movements
Diminished temperature.	Increased temperature.

3. Lesion of the medulla oblongata at the level of the decussation of the anterior pyramids.

On the opposite side	*On the same side*
Anæsthesia	Hyperæsthesia
Paralysis of movement	Paralysis of movement
Diminished temperature.	Increased temperature.

4. Lesion of the spinal cord.

On the opposite side	*On the same side*
Anæsthesia	Notably increased sensibility
Movements nearly normal*	Diminution or loss of motor power
Diminished temperature.	Increased temperature.

About the etiology of paralysis in the same side of the encephalic lesion Dr. Brown-Séquard gives the following important account:

"When a tumor exists, pressing upon the anterior surface of one of the crura cerebelli, and upon the insertion of the trigeminal nerve, if it causes paralysis, it is in the same side of the body. I have collected fourteen cases of this kind, all having the same features, which are: *incomplete* paralysis in the side of the lesion, no anæsthesia (except in one case), and frequent fits of vertigo. Now, as to the explanation of this kind of paralysis, we will say that it is either the result of the destruction of some conductors employed in voluntary movements (to regulate them or to act otherwise), or of the irritation of certain nervous

* By an error of printing the condition of voluntary movements is not correctly stated in classes No. 1 and 4 of the table in the book. The errata, however, have been noticed by Dr. Brown-Séquard in his last lectures "On the Diagnosis and Treatment of the Various Forms of Paralytic, Convulsive, and Mental Affections," published in the *Lancet*.

fibres in the peduncle itself or near it. Were the first hypothesis the true one, we should find that a destruction of the whole peduncle causes paralysis in the corresponding side only, or in it and in the other one, and not in this other alone; but there are several cases in which there has been, with such an alteration, a paralysis in the opposite side only. We should find, also, that alterations of the parts by which the crus cerebelli communicates with the muscles produce a paralysis in the same side of the body, together with a paralysis in the opposite side. But this is not what is observed. I have collected more than thirty cases of alteration in a lateral half of the pons varolii and medulla oblongata, in many of which the lesion extended to the crus cerebelli, and in all the paralysis was in the opposite side only. For instance, in a case of Dr. Annan, which I have related (see case 38, Lecture VII), the whole connexion of the *right* crus cerebelli with the *right* half of the medulla and of the pons was destroyed, and the paralysis existed only on the *left* limb. (There are a few cases, however, in which a tumor has pushed backwards and upwards the crus cerebelli, and the corresponding half of the pons, producing only a slight degree of paralysis in the same side of the body.)

"As to the other hypothesis, we will say that it is the only one we can find able to explain the production of the paralysis in the side injured, in cases of irritation of the crus cerebelli: and we will add, that perhaps the same explanation would be the right one for all the cases of the so-called *direct* paralysis. But whether it is the irritation of the fibres of the crus, or of those of the trigeminal nerve, which causes the paralysis, we cannot tell, and we have no time to discuss the question. The same reason prevents our examining why the anterior surface of the crus cerebelli, or the trigeminal nerve at its point of insertion, have more power than in their other parts, or than the rest of the encephalon, to cause a paralysis, in consequence of an irritation. I will only say, that we find that the peripheric parts of the same nerve in the gums and the bulb of the teeth, as also certain parts of the sympathetic nerve, have more power to produce a paralysis than other nervous ramifications in many parts of the body; and that, therefore, there is no ground for an objection to our hypothesis from the fact that such a paralysis is not caused by the irritation of other parts of the encephalon than the crus cerebelli. I may add, that when an irritation on a nerve causes a paralysis, it is usually in the corresponding side of the body that it appears, just as is the case when a tumor exists between the petrous bone and the crus cerebelli."

At the close of the book is the summary account of a case of this special kind of paralysis, published by Dr. Ogle, which may serve, as stated by Dr. Brown-Séquard, as a type of analogous instances. After the Lectures already examined is a comprehensive appendix on the objections against the views brought forward by Dr. Brown-Séquard, and also on the therapeutic deductions which are to be drawn therefrom. Although last, not least is the interest of this part, and we quote its general conclusions:—

a. Reflex movements alone, and not sensations and volition, exist in monsters deprived of a great part of their cerebro-spinal axis.

b. When the spinal cord, the medulla oblongata, or the pons varolii are altered, even considerably, sensibility and volition may continue to exist, because there are still communications by nerve-fibres through the altered parts, between the nerves of the trunk and limbs, and the parts of the encephalon, in front of the pons.

c. If the reasons given by many physiologists to prove that the pons varolii is the seat of the centre for volition, and for perception of sensitive impressions, were true, we should have to admit that the medulla oblongata is the centre (or, at least, a part of the centre) for these faculties, because the same reasons appear to prove the same for this organ as for the pons.

d. Very likely these faculties have not their centre (at least their principal centre) in the pons varolii, and, still less, in the medulla oblongata.

e. There appear to be, in many places of the encephalon, nerve-fibres, which are not voluntary motor, and which, nevertheless, go to muscles, either in the same side of the body as the side of the encephalon from which they originate, or in the opposite side, and that these muscular nerve-fibres are able to produce convulsions when they are irritated by an injury or an alteration in the encephalon, so that convulsions may take place either in the paralysed side or in the other.

f. The results of the researches of Dr. Ludwig Türck (showing that alteration of a part of the encephalon brings on a change in the structure of the nerve-fibres which go from the part into and along the spinal cord), cannot in the actual state of science prove against or in favor of any doctrine relative to the place of decussation of sensitive and voluntary motor nerve-fibres.

Therapeutic deductions.—The laying bare of the spinal cord, or of its membranes, is not a dangerous operation. Death after fracture of the spine is usually due to the effects of a pressure, or some excitation upon the spinal cord, and not the result of a partial or complete section. A morbid excitation upon the cord, and not its loss of action, produces:—sloughs on the sacrum, changes in the urinary secretion, alteration in the mucous membranes of the bladder, and myelitis. To avoid all these causes of death it is extremely important to remove, if possible, the pieces of bone that irritate the spinal cord. Therefore, trephining, or the extirpation of broken pieces of bone, or the raising up, or lifting out of the posterior arch of one or several vertebræ, when they press upon the spinal cord, are operations which ought to be resorted to, in most cases of fracture of the spine, as quickly as possible after the fracture, and before inflammation has set in. Clinical experience agrees with the exactitude of this assertion. Let us state, in addition, that the functions of the cord may return after cure of the wound, as also that a new bone may be produced after removal of some parts of the vertebræ.

Sloughs on the sacrum, nates, etc., in cases of fracture of the spine, myelitis, meningitis, etc., are prevented, or rapidly cured, by using alternately two poultices—one of pounded ice, kept in a bladder, applied for eight or ten minutes, and the other of very warm bread or linseed to be left for one or two hours, or even longer.

(To be Continued.)

Correspondence.

WASHINGTON.

[Special Correspondence of the American Medical Times.]

There are many facts which may be gathered in Washington and the adjoiniug region, which you may deem worthy, perhaps, of spreading before your readers; some of which I shall, from time to time, communicate, to be used or not, as may seem best in your judgment.

The present grand, forward Southern movement, now in progress, reveals the fact that there are large numbers of soldiers in the camps, who are from previous sickness, or other causes, disqualified for active service, for whom convalescent hospitals have to be provided; and these are now being prepared, not only in this city, Georgetown, and other places in this vicinity, but also in New York, etc. On Thursday last, Dr. Tenbroeck, U.S.A., was deputed by the Surgeon General to New York city, with instructions to co-operate with Dr. Satterlee, Medical Purveyor, and Dr. McDougal, U. S. M., in erecting and opening temporary convalescent hospitals for the reception of several hundred patients, who will be forwarded as soon as the buildings, etc., are ready. These will be in charge of Dr. McDougal, with the necessary assistants. On the same day, 21st inst., Dr. Joseph R. Smith, U.S.A., who is at present in charge of that model establishment, the "Seminary Hospital," at Georgetown, was deputed to find a suitable building for a convalescent hospital, large enough for the accommodation of several hundred patients, and have

it in readiness for their reception in forty-eight hours; and to-day they are being received. The long inaction of our army of the Potomac, in camp for so many tedious months, has naturally produced a great deal of sickness and mortality; greater, than would have occurred in active operation in the field. I am no judge of military matters, but looking on war in a hygienic point of view solely, were I General-in-Chief, I should try, at all hazards, to keep my soldiers moving. The demoralization and sickness of an army in camp, deprived of all sources of healthy excitement, and exposed especially at the same time to the depressing influence of a malarious atmosphere, are such as to excite our tenderest sympathies and regrets. It may, perhaps, in the estimation of some, be well, that our army is not controlled by hygienists, for if it were, strategy would probably succumb to other considerations, more closely allied to humanity. But here, as in other cases, everything must yield to dire necessity, and the accomplishment of the great ends in view. Let us hope that Washington may not be to our troops, what Capua was to Hannibal's.

It is difficult from any published statistics to get at the actual facts regarding the past mortality in our army. The statements recently published in our newspapers on this subject, are wholly unreliable. These statements purported to give the number of deaths officially returned to the office of the Surgeon-General, during each quarter of the year 1861, and that these were the deaths in 257 regiments. But it is a great mistake to suppose that the deaths so reported comprised all that had occurred in a year in 257 regiments. Many of these regiments having been but a few months in the service, only the deaths of the last quarter of the year can be considered as embracing all occurring in those regiments, the deaths given for the preceding quarters having occurred in a much smaller number of regiments. From these data it would appear that in each of the regiments represented, there were, during the last quarter of 1861, on an average, twelve deaths, or a monthly average of four deaths to each regiment. Supposing there are 600 regiments in the field, then, according to these official data, the number of deaths in the army for each month of the last quarter-year, must have been 2400, or 28,800 per year. But these rates should, perhaps, be somewhat reduced, on account of deaths occurring in general hospitals, from other regiments, and included in the returns for the quarter. The number of regiments, in service, according to Secretary Cameron's last Report, was 660, which will give, at the above rates, a monthly mortality average of 2,640 deaths.

This is a per centage of 54, scarcely more than the average mortality of the U. S. army ten years past. This is on the supposition of the army embracing 660,000 men; but there is good reason for believing that the number considerably exceeds this amount. This certainly presents a very favorable view of the health of our army, considering much of the material of which it is made up; and is conclusive in regard to the wisdom, skill, and efficiency of the Medical Department, and especially of its experienced head.

At the present time, or rather on March 14th, 1862 (at present the number is somewhat greater), there were, of sick and wounded soldiers at Seminary Hospital, Georgetown, 128; at General Hospital, Union Hotel, Georgetown, 184; at St. Elizabeth Hospital, Eastern Branch, 102; at Indiana Hospital (Patent Office), 145; Hospital for Eruptive Diseases, 56; at Douglas Hospital, Kalorama, 208; at General Hospital, Alexandria, 519; Columbian College Hospital, 237; General Hospital, Circle, 130; General Hospital, Eckington, 44—Total, 1753.

Arlington House, which has for some months been occupied by Generals McDowell and King as "Head Quarters," is now being fitted up as a Government Hospital; a better or more healthy location it would be difficult to find in this whole region. The new hospital in Judiciary Square, Washington, is now nearly completed. It will be recollected that the former Infirmary edifice was destroyed by fire on the 4th of November last. In less than five months, there has been erected a building of enlarged dimensions, better arranged, with all the modern arrangements.

The new hospital fronts on E street. In the centre there is a corridor extending 380 feet, being the entire length, with a width of ten feet. The first is called the "Administration Building." This is two stories in height, the lower being fitted up for the physicians, apothecary department, nurses, storerooms, etc., and the upper part for chambers. The kitchen is 52 by 28 feet, with many admirable arrangements and appliances for the cleanly and proper preparation of nutritious food. The centre building is 32 feet wide, by 280 in length, commodious and convenient. Contiguous to these, and in perfect connexion, there are on each side five ward buildings, 28 by 84 feet. These are so arranged as to leave immediately opposite (on the other side of the corridor), an open space of 27 feet in width, thereby securing free ventilation and abundant light. Each of these wards is furnished with rooms for nurses, and one for convalescents, besides bath-rooms, closets, etc. This vast and benevolent "Retreat" is elevated three feet above the ground, and at all seasons will be perfectly dry. It covers an area of one and a half acres, is abundantly supplied with pure water, gas, and every other requisite which can contribute to the recovery, comfort, and cheerfulness of the inmates. Under ordinary circumstances, 200 patients can here be amply accommodated; and if an emergency arise, the building is competent to receive double that number.

There is one gigantic nuisance in Washington, Georgetown, etc., which must be abated, before this can be made anything like a healthy locality. I refer to the Washington canal—constructed at an enormous expense, and at the time regarded as one of the greatest possible improvements. It seems to be the grand receptacle of nearly all the filth of the city. The waste from all the public buildings, hotels, and very many private residences, is drained into it. It is now in many places filled with accumulations from such sources, so as to present beds of rank vegetation and offensive soil, above the level of the water. How the citizens of Washington expect to enjoy good health, with this immense mass of fœtid and corrupt matter, giving off its pestiferous effluvia, is difficult to understand. The Smithsonian Institution could do no better service to the public, it seems to me, than to diffuse some useful knowledge on such matters, as well as on shells and birds' eggs. I am not about to dispute the great utility of such ingenious investigations, but were I a resident here, I should prefer to have some original researches made in other directions, as, for example, into matters lying either on the surface, or near to it. Should these labors result in the abatement of this nuisance, they would render a greater service to the inhabitants of the city, than in collecting all the corals of the tropical seas, or the rare birds and animals of New Holland and Africa.

I could hardly subscribe, however, to the plan of Mr. French, Commissioner of Public Buildings, in his recent Report to Congress, viz. to dredge the canal, and deposit all the filth on the public grounds on the south side of Capitol Square, for the purpose of filling in. This would furnish a most excellent and fruitful source of malaria for a generation to come, and might, perhaps, in one way, be a public benefit, for Congress could never prolong its sessions beyond the month of May, for fear of the annual pestilence. For one, I venture to predict, that unless the dead horses in this region be buried, and this load of filth in the canal be removed from the city limits, as soon as the summer heat prevails, there will a pestilence spring up, such as Washington has never been visited with before. Again, I say, let the Smithsonian Managers awake, and enter on a regular hygienic crusade, set the U. S. Sanitary Commission at work, and then we will see if our President and Heads of Departments cannot safely live here during summer and autumn, and not be obliged to wander to the seaside, or the mountains of New England, in pursuit of health.

More anon. L.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 31st day of March to the 7th day of April, 1862.

Deaths.—Men, 105; women, 81; boys, 165; girls, 104—total, 455. Adults, 186; children, 269: males, 270; females, 185; colored, 7. Infants under two years of age, 174. Children reported of native parents, 58; foreign, 200.

Among the causes of death we notice:—Apoplexy, 8; Infantile convulsions, 45; croup, 8; diphtheria, 13; scarlet fever, 39; typhus and typhoid fevers. 10; consumption, 69; small-pox, 7; dropsy of head, 22; infantile-narasmus, 16; diarrhœa and dysentery, 6; inflammation of brain, 7; of bowels, 14; of lungs, 31; bronchitis, 7; congestion of brain, 7; of lungs, 4; erysipelas, 3; whooping cough, 11; measles. 5. 253 deaths occurred from acute diseases, and 85 from violent causes. 315 were native, and 140 foreign; of whom 91 came from Ireland; 5 died in the Immigrant Institution, and 47 in the City Charities; of whom 9 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

Mar. & April. 1862	Barometer.		Temperature.			Differnce of dry and wet bulb. Thrm.		Wind.	Mean amount of cloud.	Humidity Saturion, 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In.	°	°	°	°	°			
29th.	30 05	.14	38	25	50	8	13	N.W. to S.	3	510
30th.	29 96	.10	35	29	51	5	8	S.E.	6	681
31st.	29 94	.13	40	34	48	2.5	4	S.E.	9	894
1st.	30.14	.20	40	36	45	5	7	N.W. to S.E.	9	707
2d.	30.20	.10	40	33	46	4.5	5	S.E.	10	730
3d.	30.00	.24	53	42	63	7	14	S. to W.	2	580
4th.	30 10	.14	51	41	60	11	17	N.W.	3	420
5th.	29.90	.30	37	34	40	2	3	N.E.	9	894

REMARKS.—29th. Wind fresh; sky variable; clear early and late. 30th, Fresh wind early A.M.; sky dark after half-past 8 P.M.; hail, rain, thunder and lightning late at night. 31st, Very light rain early A.M. and P.M. April 1st, Clear early A.M.; day overcast. 2d, Rain late P.M.; Barometer very high. 3d, Rain early A.M., with fog; clear day. 4th, Fresh wind all day; very dry air; cloudy P.M. 5th, Light rain from 11 A.M. to sunset; cloudy A.M.; clear late.

MEDICAL DIARY OF THE WEEK.

Monday, April 14.
- NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M.
- EYE INFIRMARY, 12 M.

Tuesday, April 15.
- NEW YORK HOSPITAL, Dr. Markoe, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

Wednesday, April 16.
- NEW YORK HOSPITAL, Dr. Griscom, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Sayre, Is. Hos., half-past 1 P.M.
- " " Dr. Flint, Is. Hos., 3 P.M.
- EYE INFIRMARY, 12 M.
- ACADEMY OF MEDICINE, 8 P.M.

Thursday, April 17.
- NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Elliot, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

Friday, April 18.
- NEW YORK HOSPITAL, Dr. Markoe, half-past 1 P.M.
- EYE INFIRMARY, 12 M.
- BELLEVUE HOSPITAL, Dr. McCready, half-past 1 P.M.

Saturday, April 19.
- NEW YORK HOSPITAL, Dr. Griscom, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Wood's Clinic, 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

BELLEVUE HOSPITAL MEDICAL COLLEGE.

ORDER OF LECTURES IN SPRING SESSION, 1862, FOR THE WEEK ENDING APRIL 19.

Monday, Prof. Mott, 12 M.
Tuesday, Prof. Elliot, 12 M.
Wednesday, Prof. Sayre, at Island Hospital, 2 P.M.
Wednesday, Prof. Flint, at Island Hospital, 3 P.M., (steamer leaves at 1½ P.M.)
Thursday, Prof. Wood, 12 M.
Friday, Prof. Smith, 12 M.
Saturday, Prof. Flint, Jr., 12 M.
Clinical Lectures by Prof. Taylor, Thursday, 1½ P.M.
" " by Prof. McCready, Friday, 1½ P.M.

The order of Lectures for the coming week will be published weekly in the American Medical Times.

SPECIAL NOTICES.

THE NEW YORK ACADEMY OF MEDICINE.—*On Wednesday Evening, April 16th,* DR. A. K. GARDNER *will read a paper on "Amputations of the Cervix Uteri."*

Wm. H. Davol, M.D., late Physician to L. I. College Hospital, Brooklyn, removed to St. Paul, Minn.

References.—C. L. Mitchell, M.D., T. L. Mason, M.D., Prof. E. N. Chapman, M.D., of Brooklyn; Prof. Austin Flint, M.D., Prof. B. F. Barker M.D., of New York.

John W. Shedden, Apothecary,
863 Bowery, cor. 4th St.

Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

P. W. BEDFORD,
PHARMACEUTIST,
REMOVED TO
745 Sixth Avenue, near Forty-fourth Street,
Opposite Sixth Avenue Railroad Depot.

American Medical Association.— ANNUAL MEETING.—We, the undersigned, Committee of Arrangements of the American Medical Association, after free consultation with Officers and Members in each important section of the country accessible to the Committee, feel constrained to give notice to the profession, that the regular *Annual Meeting* of the Association is further *postponed* until the first Tuesday in June, 1863.

Committee.—N. S. Davis, J. Bloodgood, G. W. Freer, H. W. Jones, E. Andrews, D. Luskie Miller, Thos. Bevan.

CHICAGO, March 29, 1862.

To Physicians.—Jerome C. Smith, M.D., late of McLean Asylum, near Boston, is prepared to receive into his house, 107 East 39th st., a limited number of Epileptics or Nervous Invalids for care and treatment. He can give them superior accommodations, and command the services of the most approved nurses.

References.—D. Tilden Brown, M.D., Supt. Bloomingdale Asylum, Manhattanville, N. Y. Edward R. Chapin, M.D., Supt. Kings Co. Lunatic Asylum, Flatbush, L. I. Moses H. Ranney, M.D., Supt. N. Y. City Lunatic Asylum, Blackwell's Island. John E. Tyler, M.D., Supt. McLean Asylum, Somerville, Mass. Rev. Wm. Adams, D.D., No. 8 East 24th St.

Descriptive Circulars with Samples of Work will be sent mail free.

Having just completed the most successful season's business they have ever enjoyed—wherein they have demonstrated that, *for all kinds of work*, they have "THE SEWING MACHINE OF THE WORLD"—enter upon the New Year with still more IMPORTANT IMPROVEMENTS, the latest being their

"NEW TAILORING MACHINE."

Having heretofore aimed almost wholly to supply a Family Machine, which should do all kinds of family sewing, and HAVING SUCCEEDED, we now enter the market with a Manufacturing Machine, which, for elasticity and strength of stitch—for rapid movements—for simplicity and durability, defies competition. While adapted to make the HEAVY ARMY AND NAVY COATS, with linen thread, it can, by a slight change, be made to do the fine family sewing; thus combining in one machine adaptation to FINE FANCY SEWING and HEAVY MANUFACTURING. This can be best appreciated by those who have owned and operated machines. We do not ask or expect the public to be governed by our statements alone. *We court investigation*, and refer to the thousands who have our machines in successful operation.

FINKLE & LYON SEWING MACHINE CO.,
538 Broadway, New York.

Sent Free by Mail on Receipt of Price.

Traite pratique d'Auscultation suivi d'un precis de Percussion, par Barth et Roger. 5e Edit. 12mo. Paris, 1860. $1 50.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

A Practical Treatise on Diseases of the Skin in Children; from the French of Caillault. With Notes by R. H. Blake, M.D. 8vo. London, 1861. Price $2.60.

BAILLIERE BROTHERS, 440 Broadway, N.Y.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians* (*principally country Physicians*) *Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapentics, the best external remedy for GOUT, RHEUMATISM, and NEUEALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bourbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Queevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion, in chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyosciamus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

CLINICAL LECTURE ON ALBUMINURIA,

DELIVERED AT THE NEW YORK HOSPITAL,

By H. D. BULKLEY, M.D.,

PHYSICIAN OF THE HOSPITAL.

PART II.

At our last meeting, gentlemen, we passed in review seven cases of albuminuria which have come under our observation during the two months just closing (Sept. and Oct., 1861), and I propose now to call your attention to certain practical points in their history and treatment from which some instruction may be derived.

In looking at these cases as a whole, you will notice that of the seven, there was but one in a female; and without drawing any conclusion from this limited number as to the relative frequency of this disease in the two sexes, I would remark that statistics show a much larger number of cases in males than in females.

Six out of the seven patients had had the venereal disease in some form, either in that of gonorrhœa or of chancre, and three of them in both forms. I mention this fact, because syphilis is classed by some writers on this disease among its predisposing causes. Of those who had the venereal disease, only one is noted as having taken mercury, and he was twice salivated, though it is probable that it was taken by others without having been inquired into. One patient, who had had repeated attacks of lead poisoning, was salivated five times for that disease, and never had the venereal. The use of mercury is also placed by some among the predisposing causes of albuminuria.

The ages of six of the patients varied between 24 and 30 years—one was sixty years of age.

Five of the patients presented that doughy and puffy condition of the face, usually so characteristic of this disease, while two of them (one of them the patient sixty years old) had a remarkably florid complexion, which formed a great contrast to what is usually seen, and which gave them the appearance of full health.

In two of the cases, the attack of albuminuria was preceded by disease of the digestive organs, one in an acute form, and the other in a chronic. The former of these first suffered from loss of appetite, headache, pain in epigastrium, thirst, etc., and entered the hospital on account of these pains, particularly after eating, and had on admission a very poor appetite, furred tongue, headache, and occasional nausea, constipated bowels, etc., with a pulse of 90 to 100, and a hot and dry skin, and was supposed at first to be laboring under a mild attack of fever. His fever subsided, and the dyspeptic symptoms diminished very much, and he had gained strength, when, at the end of about a month, it was discovered that he was passing a large quantity of urine daily (about a hundred ounces), which contained an abundant quantity of albumen, and that both his feet had become slightly swollen. The specific gravity of the urine was not noted, nor was it examined microscopically. He felt very well, however, and had a remarkably florid complexion. The urine in this case contained nearly as much albumen at the end of five months as when first found to exist in it, and the quantity passed still ranged between sixty and seventy ounces daily. When examined microscopically about a fortnight since (between four and five months after known to have albuminuria), it contained numerous casts, mostly of the large waxy variety, some of them containing oil globules. The quantity of albumen by nitric acid is now about one third of the quantity of urine. The other case under this head was in the man, sixty years of age, also remarkable for his florid complexion, and appearance of excellent general health, who had been subject to occasional attacks of diarrhœa for many years, and who, since he has been in the hospital, has had several attacks of cholera morbus without any apparent cause. He has for some time passed large quantities of whey-colored urine (seventy to ninety ounces in twenty-four hours), of very low specific gravity (1008); and large waxy casts have been found in it. I dwell on these two cases somewhat, because I think that where marked spasmodic symptoms have continued for some time, and especially where there have been attacks of either vomiting or cholera morbus, or of both from time to time, without an appreciable cause, we should always investigate the condition of the urinary organs, and examine the urine with reference to albuminuria. In the case alluded to at the close of our last lecture, you will remember that the patient had two severe attacks of vomiting without any apparent cause, and that he was found to be passing about one hundred ounces of urine daily, of a whey color, and of very low specific gravity, though no albumen could be detected in it by either heat or nitric acid, nor any casts, though the microscopical examination was less careful and less frequent than could have been wished. In the case of a private patient not long since, to whom I was called on account of a violent attack of vomiting without evident cause, and who I had been suspecting for two or three years might become the subject of Bright's disease, I was led to examine the urine, and found it to contain albumen, and also to exhibit blood corpuscles and granular casts under the microscope. The mucous membrane of both the stomach and bowels is known to be affected in a certain proportion of cases of albuminuria, as well as that of the bronchial tubes, giving rise to a troublesome cough, especially in chronic cases. I need hardly add that these disturbances are not unfrequently caused by irritating matter retained in the blood, which the kidneys are not able to eliminate from the system.

Three of our patients had been intemperate, and two had been moderate but constant drinkers. The habits of the other two were not noted. The excessive use of stimulating drinks is classed among the causes of albuminuria. I would remark, in passing, that I saw one case of this disease in private practice which proved fatal, in a gentleman, 58 years of age, who had entirely abstained from the use of everything of this kind during his whole life. He had been subject to gout for many years. His urine contained albumen, and his kidneys were found indurated and contracted after death, and he had also cirrhosis of the liver.

Some of the forms of cerebral disease were illustrated by a portion of our patients. One had had an attack of epilepsy a few days before admission; and when first seen, was in a semi-comatose state, with his tongue very much swollen, from having bitten it during the attack. This condition of his brain and of his tongue, and the fact which we were able to learn from him that he had had a dropsical swelling of his limbs, led me to suppose it to be a case of albuminuria, before any opportunity had offered for examining the urine. The quantity of albumen was very large when he entered, and at the end of about five weeks there was but the merest trace of it. This patient complained of dimness of vision during the whole of the time.

Another patient, the one sixty years of age, suffered at times, more or less, from headache, and was also occasionally troubled with nausea and dimness of vision, and also experienced a slight loss of sensation, and power of motion of the left leg. The dropsical symptoms, however, had all ceased, and the albumen had also disappeared from his urine when I first saw him, though he was still passing a large quantity of urine of very low specific gravity, and large waxy casts were also found in it.

In the case which we have not included among those of albuminuria, in which large quantities of whey-colored urine, of very low specific gravity, were passed for some time, but in which there was no dropsy, nor could any albumen be detected in the urine, nor any casts, the patient was brought into the hospital in a state of uncon-

sciousness, and had paralysis of the lower limbs, which continued for several weeks, but finally disappeared.

But one of our patients exhibited any signs of disease of the heart, and in this case they were very prominent. This was the German who entered the hospital in an advanced stage of the disease, and who only lived fifteen days after admission. This man stated that he had an attack of dropsy seven years before, which lasted thirteen months. He had an attack of dyspnœa the day before his admission, and a few days after had well-marked signs of pericarditis, and the apex of the heart was found to beat four and a half inches to the left of the median line.

All the patients had dropsical effusion into some part or parts when we first saw them, or had had it previously, which more commonly commenced, according to their account, in the feet and legs more frequently than in the face. In three of the cases, the patient who had epilepsy, and the two patients in whom the complexion was so florid, it had disappeared before they came under my care. In one other, the female, no diminution of the dropsical effusion occurred. One entered the hospital just as my term of service was about expiring, so that no plan of treatment was instituted by me, and one died at the end of fifteen days. In the remaining case, the dropsical effusion, which was abundant in the legs and thighs, had all disappeared at the end of twenty-seven days after admission.

The quantity of urine was above the average healthy standard; in five cases, in which it was regularly measured, ranging from 50 up to 110 ounces daily; and in two cases continuing at about 100 ounces for successive days, and even weeks.

The specific gravity of the urine was low in all the cases, ranging as low as 1007 and 1008 in three, and only rising to 1016 in one case for a short time; and this was in the man who had the attack of epilepsy.

The urine was examined microscopically in only four cases; and in these not so often, nor so accurately, as should have been the case, in consequence of the absence of the microscopist of the institution, which I regret very much, appreciating as I do so fully the value of such examinations in this disease. In the first case, that of the painter, blood corpuscles were found eleven days after admission; and at the end of sixteen days more, exudation corpuscles, fatty casts, a few blood corpuscles, and torulæ were seen in it. In this case, the dropsy had, at the time of the second examination of the urine, entirely disappeared, and the urine was whey-colored, and contained about one-sixth of its volume of albumen.

In the fourth case in our list, the patient who had dyspeptic symptoms for some time before albumen was detected in his urine, numerous casts, mostly of the large waxy kind, but some containing oil globules, with an abundant deposit of phosphates, were found about four months after the existence of albumen was discovered; and in the fifth case, large waxy casts were also found; and in both these cases the dropsy had entirely disappeared for some time, and both had the florid complexion and general appearance of good health before alluded to. In one of these, the man sixty years of age (the 5th case), the urine had contained no albumen for between two and three months, but was of low specific gravity (1008 to 1010), and the quantity passed was large. The other case in which the urine was thus examined, was that of the patient just received into the hospital, which contained lithates, but no casts, nor blood globules, though the examination was but a partial one.

Of these cases, one (the female) was in the hospital two months and eleven days, and left it in about the same condition as when she entered, with the urine of very low specific gravity, and loaded with albumen. Another was in the hospital twenty-seven days, and left it entirely free from dropsical swelling, and with great diminution in the quantity of albumen, with the urine of very low specific gravity, and abundant in quantity.

A third (5th case) left at the end of four and a half months, free from dropsical symptoms, and also from albumen, which had disappeared from the urine two or three months before; but still passing a large quantity of whey-colored urine, of very low specific gravity. Three are still remaining in the house. One of these has been here five months, with numerous casts in the urine, mostly of the large waxy kind, and the urine consisting of about one-third of albumen, though the dropsy has entirely disappeared, and he has the appearance of good general health. A second has been here nearly seven weeks, and is very much improved in general health, and his urine containing only about one-fifth of albumen, and of increased specific gravity. The third of this group has just entered. The only remaining one of our list died with marked signs of pericarditis and great enlargement of the heart, fifteen days after his entrance here.

A glance at the record of the cases will show that they presented features differing much from each other, hardly agreeing in anything but the presence of more or less dropsical effusion at some period of their progress, and also of more or less albumen in the urine. The only variation in the means ordinarily employed in the treatment of these cases, was in the use of the chlorate of potassa, which several had taken before I saw them, and in some of whom I continued its use, but without perceiving any special result, either good or bad. The hot-air bath was used much more sparingly than in former years. I have often used this with much satisfaction in albuminuria, but consider it much better adapted to acute than to chronic cases, as a general rule. Though a valuable resource, it should not be used indiscriminately. In some patients it causes great irritation of the skin, without producing free sweating, and sometimes even gives rise to an erysipelatous state of the skin, and even to superficial ulcers on the limbs. It was used for only a few days in the first case in our list, our only female patient, and was then discontinued on account of its unpleasant effects on the skin, and its negative results in causing free perspiration.

Dry cupping was used in the same case for some time, but with like negative results. It was applied three times a week for some time, and the register carefully examined the next day after it was done, to see whether there was any diminution in the quantity of water passed. The symptoms in this case were those of the large fatty kidney, and I doubt whether any good is to be expected from it in this class of cases. No case presented itself in which wet cups were thought advisable, though recognised as being very effectual in acute and recent cases in robust persons. Mustard poultices, followed by the continuous application of flaxseed poultices, are found of great benefit in cases not sufficiently active in their character for any abstraction of blood, and sometimes dry cups may precede these means with advantage.

Diuretics were used in most of the cases, though doubtless in some in which their use was not indicated. The combination of acetate of potash and infusion of buchu was the one almost exclusively used. It would seem more proper to dispense with this class of remedies when the quantity of urine daily passed is above the normal standard.

Purgatives were used in some of them with manifest advantage. The form used most commonly was that of the compound powder of jalap; but this was found so ineffectual in two of the cases that elaterium was substituted for it. The strong extract of this article was the form selected, and this was given in doses of one eighth to one quarter of a grain, and with most decided effect. One of the cases referred to was that of the patient who had the epileptic attack, whose bowels were obstinately constipated, and who continued to have dimness of vision for some time afterwards. The other case in which elaterium was used was that of the painter, who was obstinately constipated, and whose legs were very much swollen. He had taken liberal doses of pulv. jalap. comp., which were followed by pills containing one-sixteenth of a grain of the strong extract; and under this treatment, without the use of any diuretics, the

dropsy had nearly disappeared at the end of eleven days. The large quantity of urine which he passed (at one time 100 to 110 ounces daily) appeared to contra-indicate the use of any means to act on the kidneys.

The nitro-muriatic acid was used in one case, that of the patient in whose urine there was an abundant deposit of phosphates, and was given in doses of three drops, three times daily, in infusion of gentian. These salts ceased to appear in the urine at the end of thirty-eight days, at which time it contained albumen, in the proportion of about one-third of its quantity, and was passed at the rate of sixty or seventy ounces daily. The action of this acid is doubtless on the secondary process of digestion, and it would, therefore, seem to be well adapted to certain cases in which this is deranged. In one case of albuminuria, in private practice, in which there was great disorder of the digestive organs, I witnessed temporary benefit from the use of the Oak Orchard acid water, which doubtless acted in the same way.

Some form of iron was used in all the six cases which were treated, either the muriated tincture or the ammonio-citrate, except in one case in which the pure iron was given in combination with quinine and nux vomica, before the patient came under my care. It is probable that some form of mineral water containing iron, may be found serviceable in certain cases of albuminuria, but these should, perhaps, be avoided, if the quantity of urine passed be abnormal; though I am unable to speak respecting this from personal experience.

But I must close. Excuse me, gentlemen, if I have seemed to be too minute in my details of the cases, or have indulged in too much repetition, or have dwelt upon points of which you cannot now see the importance or the practical bearing. The interest in this disease derived from the increased attention which it is receiving from the profession, as well as from its intrinsic importance, must be my apology; and I can assure you that when called upon to take the responsibility of cases yourselves, you will eagerly seek for light both upon its diagnosis and management, which our knowledge of the subject does not now furnish so satisfactorily as could be desired.

Wounds at the Battle of Fort Donelson.—Wounds of cranium, 14; scalp, 19; eye, 4; jaw, 4; chin, 2; tongue, 1; ear, 3; mouth, 4; other parts of the face, 10; neck, 8; fractures of the shoulder, 13; arm, 16; wounds of shoulder, 30; arm, 27; elbow, 4; fractures of forearm, 4; wounds of forearm, 4; fractures of hand, 25; wounds of hand, 11; chest, penetrating cavity, 10; not penetrating, 10; back, 5; abdomen, 7; fractures of hip, 7; wounds of hip, 8; fractures of thigh, 9; wounds of thigh, 37; fractures of knee, 2; wounds of knee, 7; fractures of leg, 9; wounds of leg, 27; fractures of foot, 4; wounds of foot, 2; powder burns, 3.—*Dr. Andrews, Chicago Jour.*

The Provision for the Wounded.—The experience of the Newbern wounded has had a salutary effect upon the public. There is to be no lack hereafter of ample accommodation for as many as shall be sent homeward during the Summer campaign; and as the probability is that all the wounded who can bear the journey will be removed as early as possible from the hot and malarious atmosphere of the Southern coast, the utmost provision made here by the charitable will be wanted. The State authorities, we understand, have appropriated the Broadway wing of the Park Barracks to hospital uses. The agent of Massachusetts has secured for the reception of the New-England wounded, a large building upon the corner of Broadway and John street. These receptacles will no doubt meet every requirement so far as room is concerned. And what with the beneficent association of the city surgeons, and the appointment by Commissioners by the Eastern States, with funds necessary for the relief of want as well as of suffering, there is assurance that the wounded soldiers of the Union will lack little in their passage through New York save one thing—quietude.—*N. Y. Times.*

Original Communications.

PROTRUSION OF THE EYE-BALL AND CONSEQUENT DIPLOPIA, DEPENDENT UPON AN INTRA-ORBITAL CYST.

By FREEMAN J. BUMSTEAD, M.D.,
SURGEON TO THE NEW YORK EYE INFIRMARY.

Frances Ellison, aged 23, came under my care at the New York Eye Infirmary, March 25, 1859, for protrusion of the left eye-ball. The history of her case, as related by herself, was as follows:

When about three years of age, she one day ran in from her play upon the door-step, with her hand covering her left eye, and complaining of severe pain. Her mother found the eye protruding from its socket, and "put it back again in place." According to the testimony of the elder children playing with her, she had received no injury, but the protrusion had suddenly taken place, without apparent cause.

Notwithstanding the replacement, said to have been effected by the mother, the eye appears to have continued somewhat protuberant, "the more so whenever she caught cold," but did not greatly disfigure her until after an attack of scarlet fever at the age of seven years.

When eight years old, she was placed under the care of the late Dr. William Clay Wallace, the discoverer of the circular fibres of the ciliary muscle. Patient states that, at this time, the protrusion was excessive, so that "nearly the whole globe hung down upon the cheek," and that she was exhibited to a number of surgeons as an extraordinary instance of exophthalmos. The treatment adopted by Dr. Wallace consisted in the introduction of a seton through the cyst, passing through the upper lid. This was worn for ten months, with the effect of causing the globe to recede to such an extent that the protrusion was scarcely perceptible, and this favorable condition had continued until the autumn of 1858, when the eye began to advance again, and pain, felt especially when using the eye, obliged her to relinquish her occupation as a seamstress.

At the time of patient's first visit to the Infirmary (March, 1859), the left eye was found protruding forwards and downwards, and the upper lid was very prominent, imparting to the touch a feeling of obscure fluctuation. Upon raising the upper lid, it was evident, from the discoloration of the ocular conjunctiva and its elevation above the globe, that the protrusion was due to the presence within the orbit of an encysted tumor, which was advancing externally above the eyeball. Vision was unimpaired; but no little annoyance was occasioned by the accompanying diplopia.

The success of the treatment adopted by Dr. Wallace led me to adopt the same means, and I accordingly inserted through the upper lid and cystic walls a seton of four strands of iron wire. About a drachm of dark-colored fluid, containing flakes of greyish, cheesy material, and presenting under the microscope blood corpuscles, granular matter, and cells filled with granules, escaped from the points of puncture. The eye at once receded perceptibly; the bluish discoloration of the conjunctiva disappeared, and in a few days complete relief from the pain was obtained. From the small amount of purulent discharge excited by the seton of iron wire, too little irritation of the cystic walls was thought to be produced, and a silk seton was substituted, which was occasionally encased with the compound iodine ointment, and was worn until June 1st, 1859, when, as it appeared to have accomplished all the good of which it was capable, it was removed. The patient was now free from pain, and the eye, although far from having returned to its normal position, was much less prominent than at her first visit.

Patient has since called upon me from time to time that I might be able to watch the progress of her case. No material change, however, has taken place; the eye remaining in the same condition as upon the withdrawal of the

seton. Vision in affected eye continues good, and no inconvenience is experienced except from diplopia. In June of the present year (1861), I embraced the opportunity of studying the double images, after the usual manner, by placing the patient in a darkened room, with a red-colored glass before the right and sound eye, and noting the changes which took place in the images as a candle was carried from the extreme right to the extreme left, and from the level of the floor upwards as high as the arm could reach. The following Table, which was verified by repeated examinations, will exhibit these changes.

Patient sitting, with red glass over right eye. Distance of candle = 10 ft. Candle moved from extreme right to extreme left, a space = 10 ft. The terms "right" and "left" are used as respects patient. "Distance" refers to apparent distance from patient of the two images.

Left above at arm's length.	*Middle above.*	*Right above.*
Lat. sep. = 3 in. images crossed. Vert. sep. = 20 in. W. above. Distance, no difference. Both flames vertical.	Lat. sep. = 2 in. images crossed. Vert. sep. = 9 in. W. above. Distance, no difference. Both flames vertical.	Lat. sep. = 2 in. images crossed. Vert. sep. = 6 in. W. above. Distance, no difference. Red flame vertical, W. points to right, tip of W. being ½ inch further away than its base.
Left horizon.	*Middle horizon.*	*Right horizon.*
Lat. sep. = 0. Vert. sep. = 11 in. W. above. Distance, no difference. Both flames vertical.	Lat. sep. = 0. Vert. sep. = 5 in. W. above. R. one inch nearer. Both flames vertical.	Image single, even when candle is carried 8 inches above the horizon.
Left below to floor.	*Middle below to floor.*	*Right below to floor.*
Lat. sep. = 3 in. images synonymons. Vert. sep. = 8 in. W. above. R. is 14 in. nearer the W. flame. Both vertical.	Lat. sep. = 1 in. images synonymons. Vert. sep. = 1 in. W. above. Red is "a little" nearer than white. Both vertical.	Image single.

In examining this Table, we find,

1. The chief influence of the tumor upon the position of the left eye is to depress its horizontal meridian; this influence being more marked in the upper than in the lower half of the field of vision, and towards the left than towards right of the patient. Thus we find that the vertical separation (the white being the higher) increases from below upwards upon the left of patient, from 3 to 11 and 20 inches; in front of patient, from 1 to 5 and 9 inches; and a similar increase is noticed in proceeding from right to left.

2. The influence of the tumor upon the vertical meridian is null in the horizon. Below to the floor, the vertical meridian of the affected eye is slightly carried inwards, producing convergent strabismus; while above, it is carried outwards, causing divergent strabismus; as shown by the homonymous and crossed images respectively.

3. Again, the influence of the tumor upon the position of the V. M. of the left eye is evinced, as the eyes are directed diagonally upwards and to the right. As shown by Von Graefe, when this motion is executed by healthy eyes, the V. M. M. are inclined parallelly to the right. In the present instance, this inclination is obstructed in the left eye, the V. M. of which remains straight, or nearly so. The parallelism of the V. M. M. is therefore destroyed, and the two images upon the retina converge at the top; but, "as in conformity with the laws of normal vision, the image falling in the slanting meridian of the healthy right eye appears straight to the patient, the image of the affected eye necessarily seems to her slanting."* In all other positions than the one mentioned the V. M. M. remain parallel.

4. But one other phenomenon, the explanation of which is attended with much greater difficulty, remains unnoticed; I refer to the apparent difference in the distances of the two images in certain positions of the candle, viz., to the patient's "left below," "middle below," and "middle horizon;" in all of which the white flame of the protuberant eye is referred to a further point than the red image of the sound eye.

It is well known, that the same phenomenon attends paralysis of the superior oblique muscle, in which the *pseudo* image seems nearer to the patient than that of the healthy eye; and that it has been explained by Von Graefe upon the supposition that the eye, freed from the traction forwards of the superior oblique, is drawn more deeply into the orbit by the unopposed action of the recti. In the present instance, the diseased is in advance of the sound eye, and the image of the former is referred to a more distant point than the image of the latter; but it is evident that the phenomenon in question cannot be satisfactorily explained by the exophthalmos alone, otherwise it would be constant in the whole field of vision, whereas it is limited to the three portions above mentioned.

I fancied at one time that I had discovered the solution of this difficulty in the projection of the two images upon the horizontal plane of the floor, whereby the superior would naturally be referred to a more distant point than the inferior; but, ignoring the fact that this explanation did not suffice for the difference in the distances in the "middle horizon," I found, upon placing the patient in the recumbent posture, so that when looking towards her feet the images would be projected against the wall, that the same difference in their apparent distances existed. I was obliged, therefore, to relinquish this idea, and must confess my inability to furnish a satisfactory solution. One object, however, in publishing this case, has been to add to the known facts upon which, it is hoped, a reliable explanation of the phenomenon in question will, at no distant time, be based.

I have only to add, that the diplopia in this case is entirely overcome, and the two images are united by a prism of 8°, with its base directed upwards and inwards. I have had such a one made for my patient, which she is now wearing with great comfort.

* Dr. John S. Wells, Ophth. Hosp. Repts., vol. ii. p. 140.

THE LEAVES OF THE RICINUS COMMUNIS, AS A GALACTAGOGUE.

By WILLIAM GILFILLAN, M.D.,
SURGEON TO THE LONG ISLAND COLLEGE HOSPITAL.

In the Medical Times, January 11, 1862, I published the report of a case where the leaves of the Ricinus Communis had been used successfully as a galactagogue.

Since that time I have used it in three cases, and I shall briefly record them, that others may be induced to try the remedy. By the accumulated experience which I hope will soon be brought to bear on this subject, the powers of this will be definitely settled, and the range of its applicability correctly ascertained.

Case I.—Mrs. L., a primipara, æt. 22, blonde, quite healthy, was delivered, after a natural labor, December 22, 1861, of a vigorous male child. Her convalescence was rapid, and she was not anæmic. Three weeks after delivery she told me she had not enough nourishment for the baby and was obliged to feed him. Her breasts were fully developed, and there was no ascertainable cause for the deficiency of the lacteal secretion. I waited for two weeks longer, to observe if the milk would increase spontaneously, but it seemed rather to diminish in quantity. On the 30th of January, I directed the patient to take a teaspoonful of the fluid extract of the leaves of Ricinus communis, three times a day. After she had taken ten doses she stopped

the use of the remedy, as the milk was then quite abundant, as much as the baby could draw, and artificial feeding was not required. However, in less than two weeks, the milk began to diminish rapidly, and the baby required to be fed. On being apprised of this I ordered the patient to resume the use of the fluid extract, and continue it for four or five days. The result was the same as before, the milk became quite abundant, and feeding was dispensed with. Up to the present time the supply continues plentiful. The amount used on this last occasion was ʒ ij. in ʒ j. doses.

Case II.—Mrs. M., æt. 25, had previously two miscarriages, and was delivered in the latter part of October of a male child. She suffered considerably from hæmorrhoids, want of appetite, and was in rather feeble health. When the baby was three months old she told me that she required to feed him in great part for the last month. The child suffered from colic and occasional diarrhœa, etc., and constant vomiting, but it seemed moderately well nourished. After a short course of tonics she improved in health, and I desired her to take a drachm of the *extract* three times a day. She did so, until ʒ iij. were taken. She thought the milk had increased a little, but I am doubtful if there was much change, as the child still required to be fed. If there was any increase of milk I attribute it to her improved general health. I intended making a second trial of the remedy in this case, after two or three weeks, but at that time Mrs. M. was attacked with measles (for the second time), which rapidly assumed an adynamic type, and required strong stimulation with brandy and ammonia, to carry her through the crisis. She is now slowly convalescing, and at a future time I may try the Ricinus communis.

Case III.—Mrs. G., æt. 31, dark hair and clear complexion, tall, and in robust health, was delivered of her fourth child, a boy, Feb. 6, 1862, after a rapid labor. Previous to her marriage an operation was performed on one breast. Probably, from the description, it was the removal of a fibrous tumor; the nipple and a portion of the gland were left, but the nipple was drawn down by the cicatrix, and the breast was not used in nursing. The remaining breast was immensely developed. With her three previous children the milk became gradually more scanty after the first month of lactation, and at three months ceased. At the fifth week, Mrs. G. noticed the milk decreasing, as it had done each time previously. I ordered her a supply of the extract of the leaves of Ricinus communis, and to take a drachm three times a day. After taking six doses of it she stopped, as the milk was very abundant, more than the child could use, and *the distension of her breast very painful.* To this date the milk is quite abundant.

In the four cases in which I have used this remedy, there have been three in which the success was unequivocal, and one failure. From such small data it is often fallacious to generalize; but, apparently, no drug in the pharmacopœia acts with more certainty in properly selected cases.

This medicine would seem to be a *direct mammary stimulant.* It is indicated in all cases where such a stimulus alone is wanted for the proper secretion of milk; that is to say, where the absence or deficiency of milk depends upon a want of activity in the secerning process. We often find, where the secretion of milk is deficient, that the "fons et origo mali" lies, not in the incapacity of the mammary glands to secrete, but in the weakened state of the general system, and the impoverished condition of the blood, which contains no pabulum for the secretion of milk. In such a case, a direct mammary stimulant can be of no use. It is like drawing a check on a banker when there are no assets in the bank. Case II. is an illustration of this point. I used the remedy in that case, scarcely believing that it would have much effect. The result did not disappoint me. But when the subject is in good health and the deficiency of milk is dependent on no pathological state, this remedy is indicated, and I believe it will then rarely fail. So much for the remedy as a physiological stimulant; but I believe it may be tried usefully as a therapeutic agent. We find, occasionally, that although the mother's milk is abundant in quantity, it lacks some of the proper elements of nutrition, as evinced by the child wasting away; but if a wet-nurse be employed, or the child fed, it begins to grow. In such a case, before resorting to these last means, I would suggest the use of the fluid extract. A remedy which exercises such a power over the quantity of a secretion, must have some effect on the *quality*, and it is at least plausible, that the cases above indicated may be benefited by it. When I have used the remedy I have perceived no effect on the nervous, circulatory, or digestive organs. Its taste is not unpleasant. Where successful, its effects have been manifest in three days or less, but its trial might be prolonged if unsuccessful.

In the case which I reported in January, I used a poultice of the leaves, besides the internal exhibition of the remedy. In the three cases now reported the poultice was dispensed with, and the results were equally favorable. A poultice is unclean and inconvenient, and I believe the internal use of the medicine will accomplish everything. Yet I do not deny the efficacy of the poultice; I believe it would succeed alone in some cases.

The fluid extract was prepared and supplied by Mr. Cushman's successor, 941 Broadway, in all the cases. From him I learn that some physicians have tried it, but I have not been able to ascertain with what result. By publishing the results of their experience, whether successful or unsuccessful, physicians will contribute to settle the merits of the drug.

183 Clinton St., Brooklyn, April 7, 1862.

ON THE IMPROVEMENT OF THE CONDITION OF THE INSANE.

By JOHN B. CHAPIN, M.D.,

BRIGHAM HALL, CANANDAIGUA, N. Y.

Having given a brief sketch of the lunacy history of the State in a previous number, the inquiry which suggests itself next is, What is the present number of insane persons in the State, and the provision for their treatment and care?

The insane may be divided among four classes:—The independent, the indigent, the pauper, and criminal; a distinction based wholly upon the social condition of the individual after attack. All conjectures as to the number belonging to each class must be vague and unsatisfactory, from the manner in which census returns are made. We must, however, take them as they are. According to the last State census (1855) the total number of insane was 2742. According to the report of the Secretary of State for 1860, there were in the county poor-houses and asylums alone, 2042 insane paupers. At the same date there were 517 patients in the State Asylum at Utica, 155 in Bloomingdale Asylum, and at least 100 in Brigham Hall, Canandaigua, and in Sanford Hall, Flushing, making a total of 2814 in the several asylums and poor-houses in the State. This statement does not include the insane of the independent class, not in asylums, but cared for in private families, or the insane criminals in the asylum at Auburn. These cannot fall below 1000 in number, and may reach 1500. The total number, therefore, may be stated in round numbers to be 4000.

In disposing of insane persons the law considers three classes:—The indigent, the pauper, and the criminal. The law considers a person attacked with insanity within one year prior to application for relief, and not possessed of property sufficient to support him in an asylum, in indigent circumstances. To preserve the limited means he may be possessed of the County Judge is directed to issue an order for his admission and support in the State Asylum, at the expense of the county, for two years, if he should be so long insane. At the expiration of this period, if he should not recover, discretionary power rests with the managers to return him to the county whence he was sent. If a person not possessed of any property is attacked with

insanity, the law considers him a pauper, and the Superintendent of the Poor is directed to provide for him. He *may* send him to the State Lunatic Asylum, or to some other receptacle approved by resolution of the board of supervisors. Insane persons of the criminal class are sent to the State Asylum, or, if insane convicts, to the asylum at Auburn, where they are detained until discharged by due process of law, which can only take place when recovery has ensued.

In examining the several provisions of the law it will be observed that of the three classes the criminal is more liberally and humanely provided for; that between the pauper and indigent a discrimination, based solely upon possession of property, is made to operate against the former; that, in case the lunatic's claims come before the County Judge, he has only to examine into the fact of insanity, and the indigence of the individual, and if satisfied these conditions exist he has no discretionary power, but is directed to send the case to the asylum; that in the case of the pauper the Superintendent of the Poor may send him to the lunatic asylum, or to a receptacle approved by the Supervisor, that is, the county poor-house. As the law does not define very clearly what possessions constitute indigence, it follows that the practice in different counties is not uniform. An indigent person in one county may be considered a pauper in another, hence irregularities ensue.

County Judges and Superintendents of the Poor are elective, and chosen to perform functions entirely dissimilar. They are persons whose training, education, and powers of discrimination are, usually, widely different. The one dispenses and administers law, while the other is engaged in a variety of administrative duties which pertain to the economical care of the county poor. While these circumstances inspire the judicial officer to a more independent and appreciative discharge of his duties, the poor-officer is influenced rather by pecuniary considerations. He gradually and naturally comes to favor a system attended with the least present outlay, and so disposes of his insane as to show to his constituents a modcrate expenditurc for their support, regardless of the solemn obligations which a discretionary power or the nature of the disease impose upon him. Thus the law permits the sordid views of a public officer to control individual interests of vital moment to their serious detriment. In other cases the Superintendent of Poor is influenced by motives, not, however, the outgrowth of his humanity. It may fall to his lot to dispose of a noisy and turbulent patient, who would disturb the quiet of the county-house, or a filthy patient, who would require more than usual care to render tolerable. These cases he unhesitatingly sends to the asylum, while other cases, which are quiet, or can assist themselves, are sent to the county-house. Again, in some instances the individual is possessed of some property, and will in all probability be sent to the asylum until his limited means are exhausted, when he will be promptly removed. All cases chargeable to the Commissioners of Emigration are invariably sent to the asylum. Thus we see a variety of circumstances attaching to a case governing the disposition of it, and not the nature of the disease; how abuses multiply and become sanctioned by precedents, where the interests of the insane poor are intrusted to persons who are commonly unfitted, by education or sympathies, to exercise properly such an important trust. It must not be understood there are no honorable exceptions. We know the contrary.

No provision for the insane of the independent class is made other than we have heretofore mentioned. Such hospital accommodation as does exist has never been ample, and great numbers of citizens of this State have been compelled to resort to other States. For some unaccountable reason the presumption is entertained that private enterprise and individual efforts would provide the desired accommodations. It is doubtful whether these expectations are realized; also to what extent they should be encouraged.

Of the insane in the State but a small portion are in a hospital at a given time. The majority are in the county-houses, or at their homes. The hospitals are subject to visitation and inspection, and their officers act under certain rules for their government, all of which was intended to subserve the highest interests of the patients. On the other hand, the insane in our poor-houses, and elsewhere, are not subject to intelligent care and inspection, and there is no law, that we are aware of, that makes it the duty of a single human being to publish the abuses, or correct the wretched system under which they are compelled to exist.

The majority of the insane in the State are confined in the several poor-houses with the sanction of law, and the approval of the Boards of Supervisors. Their adaptation to this purpose deserves a brief inquiry. They are usually respectable farm-houses in size and appearance, and are intended to receive, under one organization and without classification, paupers of all classes and conditions. The intemperate, vicious and virtuous, indigent and destitute, mutes, blind, insane, imbeciles, infants and orphan children, are huddled together, and presumed to be cared for under the same roof. It is obvious that in the attempt to care for all not one class is properly provided for. Of the condition of the county houses we might speak from limited personal observation. Fortunately for our purpose, we may use the language of a committee, in a report to the Senate, made January 9, 1857. As general receptacles the committee use the following language concerning the alms-houses:—

"They exhibit such a record of filth, nakedness, licentiousness, general bad morals, disregard of religion and the most common religious observances, as well as the most ordinary comforts of life, as, if published in detail, would disgrace the State and shock humanity."

Of the treatment of the insane they say it is "frequently abusive. The cells and sheds where they are confined are wretched abodes, often wholly unprovided with bedding. In most cases female lunatics had none but male attendants. Instances were testified to of the whipping of male and female idiots and lunatics, and of confining the latter in loathsome cells, and binding them with chains. In one county, where eleven lunatics were confined, six were in chains; some of them females. * * * * In some poor-houses the committee found lunatics, both male and female, in cells, in a state of nudity. The cells were intolerably offensive, littered with the long-accumulated filth of the occupants, and with straw reduced to chaff by long use as bedding, portions of which, mingled with filth, adhered to the persons of the inmates, and formed the only covering they had."

There is a *Universal Society of Ophthalmology*. Each year it changes its seat of action from one to another of the great scientific centres of Europe. Eleven such centres of action have already been chosen; viz. Berlin, Brussels, Leipzig, London, Munich, Paris, Prague, Turin, Utrecht, Vienna, Zurich. Each centre has its Committee. The London Committee is composed of Messrs. Bowman, Critchett, Streatfeild, and White Cooper. This year the meeting takes place in Paris, between September 30th and October 3d.—*Brit. Med. Jour.*

Dr. W. H. Church, of this city, Medical Director of Gen. Burnside's army corps, successfully ligated the external iliac artery after the battle of Roanoke Island. We learn also that the surgeon of a New York regiment ligated the common iliac artery after the affair of the Merrimac at Fort Monroe.

Quekett Medal.—The council of the Microscopical Society of London have resolved to raise a fund the interest of which shall be devoted to the purchase of a medal called the "Quekett Medal." It shall be given annually to that member who, in the opinion of the council, has best promoted the interests of microscopical service.

Reports of Hospitals.

BELLEVUE HOSPITAL.

COMPRESSION AND LACERATION OF BRAIN.

ILLUSTRATED WITH CASES.

(*Continued from page 207.*)

SERVICE OF DR. WILLARD PARKER.

CASE IV.—*Fracture of the Skull; Extravasation of Blood over the opposite Hemisphere of the Brain; Convulsions; Death on the 13th day.* (Reported by B. A. SEGUR, M. D., House Surgeon.)—Margaret Martin, æt. 30, widow, intemperate, and the mother of two children. Four days before admission to the hospital patient fell into a sub-cellar, and received contusions on the head and elsewhere. The injury was followed by loss of speech, and vomiting, but no impairment of intelligence. She was able to sit up and walk about until the fourth day, when convulsions set in. On admission she was stupid; was unable to protrude the tongue, or to make any other voluntary movements; there was paralysis; a frequent quick and weak pulse; extremities cold; she then had convulsions for several hours, which did not again make their appearance until the sixth day. The paroxysms were frequent, and were characterized by tonic contraction of the muscles, rolling of the eyes upwards and to the right, thumbs drawn in to the palm, and expiration scarcely performed, inspiration catching. During the intervals of sense and general convulsion there was constant twitching of muscles, especially of the face. The pupils were natural in size, and answered to light, the left being a little sluggish. The bronchial tube became impeded with mucous exudation, and at length patient was quite insensible.

On the seventh day she passed from an insensible state to delirium, walking about the ward, and impatient of interference or control. On the day following she again had frequent paroxysms of general convulsions, mild in character, perfect quiet intervening. Dr. Willard Parker, visiting surgeon, trephined the skull at the point of tumor; this was found to consist of extravasated blood; the denuded skull bled. The operation did not discover any cause for the symptoms. A few hours after new symptoms appeared; patient became hemiplegic on right side; decided increase of intelligence; the convulsions were no longer general, but confined to the right, the paralysed side; pulse 96, small, and compressible; respiration 30. Death took place on the thirteenth day. While under observation the bowels and kidneys were active, and the passages were not apparently observed by patient. Pulse increased in frequency, reaching 140, failing in force at the same time; respiration daily became more hurried, the last three days being from 36 to 48 per minute; at no time were the pupils contracted, insensible, or markedly unequal; no coma, but rather increase of intelligence, as manifested by readiness in taking nourishment.

The face on the tenth day became drawn to the left side. Marked increase of temperature was noted on the paralysed side. The manner of death indicated exhaustion of innervation, marked by laxness of the skin, moisture, decrease of temperature, pulse sinking away, respiration a mere thoracic motion, and complete insensibility.

Autopsy.—Extravasation of blood and ecchymosis in scalp on right side. Fracture of the skull extending from a point on the right, and posterior to the vertex, downwards behind mastoid process, nearly or quite to foramen magnum. The dura mater over left hemisphere was lifted up, dark and opaque. Between it and the brain extravasated blood to the depth of half an inch, black, and semi-fluid. In the lower portion of middle lobe a small clot projected into the brain substance, and was bounded by red softening. Thoracic and abdominal viscera congested; otherwise in appearance healthy.

SERVICE OF DR. ALONZO CLARK.

CASE V.—*Apoplexy; Complete Paralysis of Right Side. Death; Autopsy.* (Reported by A. N. BROCKWAY, M.D., Senior Assistant Physician.)—Charles A——, brought to the hospital by a policeman, Nov. 9th, 1861. The officer stated that he found him in an insensible condition upon the sidewalk, and was informed that while patient was walking along the street he was seen suddenly to fall. He was apparently about 50 years of age. No previous history could be obtained. When admitted he was insensible; pulse 88, full, and the respiration slow, but not stertorous; pupils dilated, and not sensible to light; extremities cold. There was complete paralysis of motion on the right side. When the integument on that side was pinched, convulsive movements took place, probably from reflex action; pill of colocynth and croton oil was administered, and the bladder relieved by the catheter of three oz. of highly colored urine, not albuminous; sp. gr. 1008. The cathartic produced copious evacuations. At six P.M. the condition of the patient was slightly improved. When spoken to loudly would open his eyes, and give signs of animation. Being told to protrude the tongue would open his mouth and make ineffectual efforts to do so. Tongue inclined to the right side. Took six oz. of blood by cups from the back of the neck. Nov. 11th.—Both urine and fæces passed involuntarily in bed. Can swallow fluids readily, but solids produce a choking sensation. Nov. 14th. —Condition much the same. There being a tendency to bedsores patient was to-day removed to another bed. Nov. 17th.—Pulse 98, weak; ordered beef-tea and eggs. He seems to recognise those about him, and tries to talk, but is not intelligible. Nov. 20th.—Is failing; pulse scarcely appreciable at the wrist, and the capillary circulation everywhere is languid; paralysis of right side complete; urine and fæces passed involuntarily. For one or two nights past has been restless, making a noise, and disturbing those about him. Takes of stimulants six oz. per diem. Nov. 23d.—Is sinking gradually; pulse not appreciable at the wrist; stimulant continued. Patient died quietly at about noon to-day.

Autopsy. Fifty hours after death.—The dura mater was seen to be somewhat congested, and after removing this membrane the arachnoid was found much distended with serous fluid, with here and there patches of lymph, giving evidence of recent inflammation. By dividing the brain laterally the left lateral ventricle was found distended with coagulated blood to such an extent that a portion had passed through the foramen of Munroe, and filled the anterior cornu of the right ventricle. Anteriorly the extravasated blood had ruptured the left ventricle, and penetrated for about an inch into the substance of the brain. There was an ounce or more of bloody serum in the posterior cornu of the right ventricle. All about the coagulum there was evidence of red softening. The ruptured vessel was in the corpus striatum of the left side. Dr. Clark considered the apoplexy primary, followed by cerebritis or red softening, and this in turn producing arachnitis with effusion.

DRS. HENRY M. LYMAN, Benjamin A. Segur, S. W. Bowles, Charles H. Suydam, Sylvester E. Strong, and R. Halstead Ward, left this city several days since, under orders to report to the Medical Director at Nashville, Tenn., where they are to do hospital duty.

THE *observance of the Sabbath* is a duty to which medical men are bound, so far as is compatible with the urgencies of the cases under their charge. Visits may often be made with sufficient convenience and benefit either before the hours of going to church, or during the intervals of public worship. And in many chronic ailments, the sick, together with their attendants, are qualified to participate in the social offices of religion, and should not be induced to forego this important privilege by the expectation of a call from their physician or surgeon.—*Prof. Baker's Valedictory.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

STATED MEETING, March 12, 1862.

(*Continued from page* 209.)

MAMMARY TUMORS.

DR. KRACKOWIZER presented a tumor, removed a few days before from the substance of the breast of a young female twenty-six years of age. She had noticed the commencement of the growth about three years ago. It, however, gave no pain, and remained stationary until within the last few months, when it commenced to grow quite rapidly. The tumor was situated in the substance of the gland, was quite movable, felt pretty solid, and was thought to be sarcomatous in character. After its removal it was found constituted of lobulated texture; the single lobules being very firmly united by some streaks of adhesive fibrous tissue, with orifices scattered throughout. Under the microscope it presented the true glandular structure, and belonged to the variety styled, by Paget, mammary tumors.

ANEURISM OF SUBCLAVIAN ARTERY.

DR. KRACKOWIZER next presented a specimen of rupture of an aneurism of the subclavian artery, and gave the history as follows:—The patient, from whom this specimen was taken, was a man forty years of age, originally of a very robust constitution. He had a fine voice, and being attached to one of the popular glee clubs was very frequently out late at night, and indulged somewhat in the use of strong beverages. Some years ago he attached himself to a musical band and performed on the trombone. The habit of drinking indulged in previously became now a professional necessity, although he could not strictly be said to have led an intemperate life. A few years ago he contracted syphilis, but the want of a proper restraint upon himself rendered treatment for the affection almost useless. I was informed that after this attack he would be subject to occasional attacks of eruption, when he would resort to medical treatment until such time as he began to improve, when he would again neglect himself. Notwithstanding all this his constitution kept up very well until two years ago, when he noticed that after the usual excesses he felt very languid and sick for a few days following; he also was, at times, troubled with a cough. He still pursued his vocation until ten months ago, when in the act of moving, one very cold day, he was taken with hoarseness, which amounted almost to aphonia. He never regained his voice from that time. He applied to several physicians, who considered the disease to be laryngitis. The usual remedies were administered internally and externally, but without any manifest improvement. During all this time he continued to perform on his wind instrument without any difficulty. About the last of October his band marched with a regiment to Washington, and since that time he had been in camp doing his duty as a musician up to eight or ten days before he died. About that time he noticed a little swelling in the subclavian region, which had commenced without any unusual sensation; this he showed to the surgeon of the regiment, who pronounced it a simple glandular swelling. But the tumor still continued to increase in size, and the surgeon, examining it a second time, pronounced it aneurism, and urged him to go home in order that an operation might be performed for his relief. Several days were lost in getting through the formalities which are deemed necessary to grant a furlough; meanwhile the swelling so much increased that considerable difficulty of swallowing was occasioned. On the 25th of February he took the night train for New York. He felt very sick indeed, and was two or three times attacked with suffocation in the cars. He arrived on the morning of February 26th; whether he went towards home in an omnibus or not is not known, but near his house he was recognised by some friends, who were shocked by his condition, and his great dyspnœa. With their assistance, however, he was able to walk up to the fifth floor of a tenement house. When he arrived in the room and took a chair, he was seized with a frightful attack of suffocation. A physician was sent for, who, on looking at the tumor, let me know immediately of the man's condition, in the hope that something might be done by an operation. After the news reached me I started at once for the place, and arrived there about four o'clock the same afternoon.

I found the patient sitting in a high-backed chair. The eyeballs protruded somewhat, and the right pupil was contracted, while the left was somewhat dilated. The face was of a dusky hue, and bathed with perspiration. The breathing was loud and difficult, while the neck was disfigured by an immense tumor, which commenced immediately under the chin and extended down to the clavicles, the lateral limits being each trapezius muscle. The tumor was of such a size that at its highest point it was about two inches above the level of the chin. The larynx and trachea could neither be felt nor seen. The skin was extended to its utmost degree, so that there was not the slightest possibility of raising the smallest fold. On the right side the skin had somewhat of a doughy feel; and there were two or three ecchymotic spots upon the surface. Pulsation could easily be detected by the eye almost all over the tumor, at least its right or most prominent portion. Applying the stethoscope in that situation a loud bellows murmur was detected, but no aneurismal thrill. The right side of the tumor somewhat overlapped the clavicle of that side. The respiration was 24 per minute, very labored, and there was no pause between inspiration and expiration. With every inspiration there was a deep hollow formed on each side under the false ribs. The sound of percussion was normal everywhere, and a harsh vesicular murmur was heard all over the chest. The situation of the heart was normal, the apex being felt underneath the fifth rib. The dulness over the precordial region was normal in extent, and the rhythm of the heart was perfect. The pulse in the left wrist was not accelerated, but rather somewhat retarded, while the right radial pulse was silent. The gentleman who had seen the case previously said that at that time there was a very feeble pulse on the right side. So it seems that the cause of pressure of the subclavian was then still going on. These were the prominent symptoms. I was just through with my examination, and had barely opened the window, and sent for ice, when the patient seemed to breathe with more difficulty. He looked somewhat bewildered, and attempting to rise he was forced gently back into the chair again. His face became dark blue, his eyes protruded, and the perspiration streamed profusely down the face. I thought he would certainly die asphyxiated. Meantime the ice arrived, and by rubbing the temples and neck with it this attack passed over to give way to dyspnœa of a more severe character. His consciousness seemed to have been lost. The muscles were so relaxed that the trunk could not be maintained erect without assistance. The action of the heart, however, soon became vigorous again; but the pupils, between which there existed such a disparity before the attack, now became of equal size. I sat by the patient's side for two hours, when a medical friend volunteered to watch longer. The statement of this gentleman was, that he remained in that condition up to twelve o'clock that night, when he began to move his hands. This was the first sign of returning muscular action. He was offered water, which he refused (by words), being afraid that suffocation would be induced if he partook of any. He arose himself about this time, and with support walked through a large room and sat down on his bed. He was propped up in a recumbent position, when shortly after he began to talk incoherently of matters connected with military life, and quietly died.

The post-mortem examination was made thirteen hours after death. The swelling of the neck subsided sufficiently to fall back under the chin. The rigor mortis was marked. The sternal extremity of the clavicle of the right side was unusually prominent, in consequence of the sterno-clavicular ligament being much relaxed. After the thorax was open the upper lobe of the right lung, and the whole of the left lung, were bound down by pretty firm adhesions. There was also a small deposit of tuberculous matter in the upper lobe of each of these organs. The pericardium contained the normal quautity of serum. The skin of the neck was very firmly adherent to the superficial fascia underneath, and was infiltrated partly with extravasated blood, and partly with bloody serum. The right sterno-cleido-mastoid muscle was pushed outwards and backwards, while the same muscle of the left side was more nearly in situ. The space between them and the chin was occupied by a large dark-colored tumor. After the superficial fascia and muscles arising from the sternum had been cut away, a large fresh-looking coagulum was exposed running up in the direction of the large vessels as far as the level of the hyoid bone. This cavity was filled with liquid blood. The posterior aspect of the sternal extremity of the right clavicle was bared of its periosteum, but the articulation was not open although the capsular ligament was very much relaxed. The clavicle and part of the first rib were cut through, and the whole mass here presented, including the heart, large vessels, etc., was brought home for more careful examination. The coagulum found underneath the superficial muscles of the neck seemed to permeate all the structures between the superficial and deep layer of the fascia colli, and its limits above on the right side are the right side of the epiglottis, and the right side of the pharynx. The innominata seems to be about the normal size, although its coats are somewhat thickened and irregularly hard from patches of atheroma imbedded in their substance. The same degeneration is observable in the common carotid, which, however, shows no signs of dilatation; but immediately above the origin of the common carotid, where the origin of the subclavian ought to be, it dilates into a sac the size of a hen's egg, with rather thin walls, from the posterior part of which the subclavian takes its ulterior course. The sac occupies a very short space upon the artery, equal only to about three-quarters of an inch. The par vagum is bound down by very firm adhesions to the sac of the aneurism; so also is the recurrent laryngeal. The left carotid and left subclavian seem to be normal; the aorta feels as do the generality of vessels where the process of atheromatous degeneration has taken place. On putting the finger into the aneurismal sac from behind it enters the cavity in front, but I am not able to detect the situation of the rent. It looks as if, after the rent had taken place, the edges had become everted and deposits of blood had taken place so as to obliterate it.

There is one point in this case which is of great interest, viz. the condition of the pupils before and after the attack which threatened asphyxia. On the one side where the greatest pressure was exercised by the blood in both a liquid and coagulated form, the pupil was contracted, which shows that the cervical portion of the sympathetic nerve was sufficiently pressed upon to paralyse it, and thus increase its influence upon the constrictor of the pupil. Ogle has collected about nineteen or twenty cases where he has shown that if the pressure upon the sympathetic through its cervical division is enough to obliterate its function, then the pupil will be contracted, but when the pressure is sufficient to irritate the nerve then the pupil becomes dilated. In this case, after the threatened attack of asphyxia had passed off, the action of the heart became weaker, the pressure of the coagulum was less, and the pupils were consequently normal in size. At the time the autopsy was made, œdema glottidis existed to that extent as almost to close the entrance to the trachea.

Dr. Clark supposed that the true explanation of the case, as would be given by Dr. Krackowizer, was, that there had existed an aneurism of the ordinary sort for some months, and that on the patient's journey home from Washington a rupture had taken place, and that the tissues outside the artery held the blood in check during the time he was under observation in this city.

Progress of Medical Science.

PREPARED BY DR. P. F. C. DESLANDES.

ON VACCINATION OF INFANTS.

(*Continued from page* 194.)

Dr. Laforgue, surgeon in chief of the Maternité of Toulouse, in a very interesting communication entitled *Note sur les vaccinations prematurées*, published in the *Union Médicale* of the 21st of September, 1861, expresses himself thus on early vaccination: "When I was appointed surgeon to the *Maternité* and the *Crèche*, of the Hotel Dieu, where it is customary to vaccinate children a few days after birth, I could not help expressing my astonishment and my fears at such practice. It was my principle not to advise vaccination, except during the second or third month after birth, and I did not think proper to inoculate vaccine during the first months of life. Indeed, I considered this period of the new-born's existence as a period of transition, during which the child undergoes the organic transformations proper to extra-uterine life, and I thought it necessary to wait till the organization was complete before inoculating a morbific principle whose action, unknown in its essence, is very manifest in its effects. The persons attached to the Maternité and the *Créche* for several years, assured me that experience had shown the innocuity of vaccination practised immediately after birth. It was not long before I recognised my *à priori* fears were not founded. After some little hesitation circumstances forced me to adopt the precaution of the house. Variola having made its appearance in the wards next to the *Maternité* and the *Créche*, it became my duty to vaccinate all the children without distinction of age. This general vaccination gave rise to one serious accident. From that time vaccination is practised on all the new-born children to insure them the benefit of the vaccine when they leave the *Créche* to be intrusted to persons who, for the most part, live in the Pyrenees, where variola is sometimes epidemic. The objections I had to early vaccination disappeared before the numerous cases of innocuity of that operation when practised in healthy children—sheltered from the morbid influences which too often prevail in *Maternités* and *Créches*. Therefore, when I was appointed to experiment with the cow-pox, I took advantage of the favorable conditions in which these establishments were, to try it on healthy children, and on those born in the intervals between the sittings for vaccination.

I give the results of these vaccinations in a short summary of the report presented to the committee by whom I had been appointed. On the 4th of May, 1860, I repaired, at 4 o clock P.M., to the Veterinary School, at the invitation of Mr. Lafosse, to inoculate to a child of the *créche* the cowpox produced in a cow by the inoculation of the grease from a mare. In the presence of Professors Lafosse and Serres, of Drs. Cayrel and Omen, and of the students of the clinic, I inoculated, by eight punctures with a new lancet, the virus taken from two pustules developed on the left teats of the cow, to the arm of the child Rieux, born March 9th, 1860, and consequently fifty-nine days old. During the same sitting, Dr. Cayrel inoculated with some virus taken from the same cow, two older children. After this vaccination two pustules appeared on the left arm of the child Rieux, and one on the right. The development and character of these three pustules were those of the vaccinal pustules. The members of the committee who examined them, ascertained that they were identified by their form, their color, and their structure, with the pustules pro-

duced by good vaccine. On the 12th of May, the eighth day, I vaccinated four children with the virus of these pustules. Every eighth day I practised new vaccinations, and I continued to do so until the 30th of June, 1860. At this period *Muguet* having made its appearance in the crêche, I suspended the vaccination, as we are obliged to do every year, during the great heat of summer, on account of the grave diseases which affect new-born children. From the 12th to the 30th of June, forty-five children were vaccinated during the first days of life: two children were one day old; four, two days; two, three days; five, four days; two, five days; five, from six to twelve days; three, thirteen days; three, fourteen days; one, fifteen days; one, sixteen days. Six punctures, three on each arm, were made to all these children. All had six beautiful characteristic pustules. Of forty-five children vaccinated, two only were affected with erysipelatous inflammation of the skin. These were a little girl named Cansel, thirty-five days old, and a boy named Oltier, fourteen days old. In the first the erysipelatous inflammation, with swelling of the arms, appeared during the inflammatory period of the pustules. This eruption disappeared at the time of desiccation, and the child, apart from a little fever, experienced no change of health. In the second the swelling was accompanied by an erysipelatous redness, which spread over the whole body. Notwithstanding the intensity of this eruption, and of the fever which followed it, this affection ended in recovery. On the 7th of July, forty days after vaccination, this child had perfectly recovered, and could be placed out to nurse. The other forty-three children presented no other phenomena than those which usually accompany vaccination.

To sum up: the cowpox taken from the first cow of the Veterinary School, and inoculated to a child nearly two months old, produced three vaccinal pustules presenting all the pathognomic characteristics of good vaccine. These pustules furnished vaccine for the eight sittings of vaccination which took place every eighth day, and during which forty-five new-born children were vaccinated from arm to arm; of these twenty-eight were from one to sixteen days old, and seventeen from one to nine months. These vaccinations all succeeded, and gave as fine pustules as those of the old vaccine. Of the forty-five children vaccinated, two were attacked with erysipelatous inflammation of the arm, which, in one child fourteen days old, spread all over the body. These two children have recovered, notwithstanding the bad conditions of salubrity in which they were placed, muguet having made its appearance in the *crèche*. Two vaccinated children were attacked and recovered. This affection was benign. The results furnished by the vaccination with the cow-pox are similar to those obtained by the vaccination of the preceding year, and of this year. The new-born children have supported perfectly well the vaccinal eruption, and none have died from the consequences of inoculation.

The innocuity of vaccination practised during the first days of the life of children is then a well established fact. On the maternity of Toulouse, we have even observed that generally, the inflammatory reaction, produced by the vaccinal pustules, was not so strong in children of that age as in older ones. Whilst new-born children from two to eight days hardly feel the eruption, we see erysipelas and vaccinal fevers break out in children several months old. It is so true that the evolution of vaccine is slower and less intense in children just born, that some persons, witnesses of these phenomena, have doubted the preventive value of premature vaccination. However, these phenomena have nothing to surprise physicians who know how little reaction accompanies operations performed on children a few days after birth. Circumcision, the operation for hare-lip, the removal of supernumerary fingers, react proportionally less in the economy as they are performed at a period nearer birth. I have twice removed supernumerary fingers the day after birth, and these operations have healed by first intention without producing any disturbance in the organism. Undoubtedly these operations are not to be compared to vaccination, which, besides the effect of the local inoculation, acts in a general way on the constitution; but they show of how little inflammatory reaction the skin of new-born children is susceptible, and explain the relative innocuity of the vaccine inoculated the first days after birth.

Dr. Cayrel, conservateur of the vaccine for the Department of the Haute-Garonne, whose long experience has a great weight in all questions relating to vaccine, has ascertained that the intensity of vaccinal reaction was in proportion with the age and development of the children. Null or very feeble in the new-born, it is sometimes very great in older ones. But because premature vaccinations are not dangerous, it does not follow that these operations are always inoffensive. The accidents and the deaths observed by M. Barthez, during or a few days after the evolution of the vaccine, may be the consequence of the want of hygienic care or of morbid complications so frequent and so grave in new-born children.

The vaccinated child, whatever be his age, must have attention and care that shelter him from morbid complications which threaten him during the evolution of the vaccine. These precautions are not taken by persons leaving the *maternités*, after the vaccination of their new-born children, and then it is not surprising if these children are seized with grave symptoms a few days after their departure from the establishment. We must then take into good account, in the appreciation of facts relating to the result of vaccination, the hygienic and social conditions in which are placed the children under observation.

To sum up, I think myself justified in concluding, 1st, that vaccination practised on children during the first days which follow their birth is not dangerous; 2d, that the accidents observed after vaccination are exceptional, or due to causes foreign to vaccination. But it does not follow from these conclusions that children ought to be vaccinated during the first days which follow their birth. In my opinion premature vaccination must be considered as a necessary operation in the *maternités* and the *crèches*, and in children placed in peculiar conditions of variola infection.

In ordinary practice, and outside of these conditions, the age of three months seems to me the most favorable period for vaccination.

M. Chalvert, writing of the insalubrity of French hospitals, says, *inter alia*: "The charpie and different materials used in dressing wounds, etc., are kept too long in the wards. They absorb gaseous emanations. By an unfortunate coincidence, also, the supply of charpie is generally kept by the side of the *lieux d'aisances* (we cannot say water-closets). I have seen," he writes, "the same box containing charpie for a month's consumption actually kept in the very *lieux* where all fœtid and morbid and fæcal matters from the ward were deposited. Moreover, the apparatus, etc., which have been used in dressing, and soaked in pus, etc., are often left all the morning in the wards. Compresses, pads, etc., are all massed together, and become a focus of fœtid emanations. The washing often of the linen used in poultices, etc., is very defective. Splints, again, are not cleaned and washed, and often give out a putrid odor in the room where they are kept."—*Brit. Med. Jour.*

Dr. Herrmann, who has had great experience in the treatment of syphilis, has peculiar ideas concerning the nature and treatment of the disease. "Syphilis," he tells us in the *Wien. Medicin. Wochenschr.*, "is a local disease. It is accurately limited to forms which stand in immediate organic connexion with the original disease, and have a local character." He knows of no such thing as a general syphilitic poisoning of the blood, and affirms that all the forms which have been hitherto traced to a syphilitic crasis of the blood, and considered as constitutional, do not belong to syphilis, but are distinctly to be traced to chronic mercurialization—to the admixture of mercury with the food.—*Brit. Med. Jour.*

American Medical Times.

SATURDAY, APRIL 19, 1862.

CONTROL OF SMALL-POX.

The accumulated evidence that small-pox is a preventable, and even eradicable disease, presents a series of facts from which conclusions are deducible, as undeniable as mathematical demonstrations. There is no subject in medicine which experiment has more satisfactorily settled. It is of the highest importance that the medical profession should accept these facts in the most unqualified manner, and impress them upon the community; for the ultimate aim of these conclusions is the protection of the people by the thorough and persistent application of the remedy.

The several questions growing out of a discussion of this subject have recently been presented in a forcible light,* and we propose to call the attention of the profession briefly to them. The first of these queries is:—Does vaccination afford positive protection to those exposed to the variolous contagion?

In some continental countries vaccination has long been compulsory, and the statistics which they present prove the power of vaccination to prevent small-pox. For example:—"In Holstein, from 1801 to 1822, 234,959 were subjected to vaccination, and only two individuals, even two years subsequent to this, had during all that time been affected with small-pox. In the kingdom of Denmark, during the same period, only one individual among 447,605 vaccinated had been attacked by modified variola." Within a few years great efforts have been made by the British Government to settle this question for the purposes of legislation. A large collection of facts was made, which are conclusive upon this point. To prove the unanimity of opinion on this question among English and Continental physicians, it is sufficient to state that of five hundred medical men to whom the following question was addressed by Mr. Simon, Medical Officer to the General Board of Health in London, all but two answered negatively:—Have you any doubt that successful vaccination confers on persons subject to its influence, a very large exemption from attacks of small-pox, and almost absolute security against death by that disease?

Very pertinent to this inquiry are the facts furnished by Dr. Whittlesey, Resident Physician to the Nursery Hospital Randall's Island, New York, to Dr. Sayre, Resident Physician, of New York. The latter says, in his recent memorial to the Commissioners of Health:

"During the years of 1854–55–56, there were admitted 3,566 children, and yet no case of Small-pox occurred during this period, except four cases that were brought there suffering from the disease at the time of admission, and it never spread to the other inmates in a single instance. During these three years the Doctor attended personally to the vaccination of every child on admission, but in the subsequent five years he states that it was done by subordinates, and in many instances overlooked entirely, and the result is clearly seen in the tables below, which show that 44 cases of Small-pox had occurred out of 6,867 children admitted during these five years. But in the Refuge Hospital, which he retained under his own personal supervision, and in which he has persistently continued the plan of vaccination on admission, he has *entirely exterminated the disease for the last seven years.**

There have been admitted to the Refuge Hospital since 1855, 2,440 children, and all deemed unprotected have been vaccinated on their arrival. Dr. W. makes the following statement in regard to this Institution:—

"During this period of seven years, no cases of Small-pox or varioloid have occurred in the Refuge, notwithstanding there were children admitted, during the time, suffering with the disease, necessarily exposing the inmates to contagion."

A second question proposed is this:—"*Is the protection permanent?*" Every practitioner can bring to the settlement of this question observations in his own practice. That the protection is not permanent, and that the protection diminishes with age, is the universal testimouy of the profession.

A third query is suggested by this answer, viz. "Is re-vaccination a preventive of small-pox?" It was early noticed in continental military establishments that small-pox would attack those soldiers who had been vaccinated when young, and cause a considerable mortality. Re-vaccination began to be practised on a large scale, and the results show most conclusively that re-vaccination is a preventive of small-pox. It is stated in the English reports that

"During the five years, 1833–7, though small-pox infection had been sixteen times imported into different regiments of the army, there had ensued among the 14,384 re-vaccinated soldiers only—in the person of one whose re-vaccination two years before had been followed by 'modified success'—a single instance of varioloid."

"From 1843 re-vaccination has been compulsory in the Bavarian army; and from that date to the present time (1857), neither a single death of small-pox nor even a single case of unmodified small-pox has occurred in that population."

"For the last twenty-one years, re-vaccination has been general in the Danish army, and for the last thirteen years in the Danish navy; and these two populations have almost entirely escaped contagion during several epidemics of small-pox."

The propriety of compulsory vaccination has been long and earnestly discussed. In view, however, of the preceding facts, can there longer be a rational doubt of its propriety? Small-pox is the most loathsome scourge known to the human race; but there is a simple remedy which can eradicate it, provided every child uses the antidote. Shall the foolish prejudices of some ignorant persons, and the negligence of others, longer be allowed to be the means of propagating from generation to generation this dreaded disease? It is time this question of compulsory vaccination were decided in the affirmative, and stringent laws were made to enforce it. The movement of the Commissioners of Health of this City to obtain legislation to this effect, should be sustained by the citizens, and similar efforts should be made in other States.

* Sanitary Commission. E. Report of a Committee appointed by the Sanitary Commission to prepare a Paper on the Value of Vaccination in Armies. F. G. Smith, M.D., and A. Stillé, M.D., Committee.

* Memorial of the Board of Commissioners of Health, of the City of New York, on the subject of Compulsory Vaccination, with a view to Exterminate the Small-Pox.

THE WEEK.

The need of volunteers to the Surgical Staff of the army to meet the emergencies which the destructive battles in different parts of the country now almost daily occasion,

has led the Governors of many States to organize volunteer corps. In this State Gov. Morgan, with the aid of Surgeon-General Vanderpoel, has organized and commissioned an auxiliary corps, which is composed of the following gentlemen:—Drs. James R. Wood, Alfred C. Post, Ernest Krackowizer, Stephen Smith, Charles D. Smith, Geo. A. Peters, John O. Stone, Thaddeus M. Halstead, Willard Parker, Gurdon Buck, Lothar Voss, Thomas M. Markoe, and William Detmold, of New York city; Alden March, John Swinburne, and S. Oakley Vanderpoel, of Albany; Edward H. Parker, of Poughkeepsie; Charles Winne, of Buffalo, and De Witt C. Enos and Joseph C. Hutchinson, of Brooklyn.

—

The following order has been issued by the Secretary of War:—

"Grave complaints against Assistant Surgeons Hewitt and Stipp having reached the Department, they are suspended from duty and ordered to report themselves. A negligent or inhuman surgeon is regarded by this department as an enemy of his country and of his race, and will be dealt with according to the utmost rigor of the military law."

Dr. Hewitt is from this city, and is a gentleman of good character and eminent ability. Such charges as are here implied should be promptly investigated by the proper tribunal, and will, we believe, as in the case of Surgeon Porter noticed last week, be proved groundless. The whole profession will heartily endorse the noble sentiment of Mr. Stanton regarding the character of an unfaithful medical officer.

—

The Medical Reform Bill has passed the lower House of Congress, and has since been subject to some amendments by a joint Committee of both Houses. As it now stands the changes which it produces are operative only during the present war.

—

The Metropolitan Health Bill has passed one branch of the New York Legislature, and has met with unexpected difficulties in the way of proposed amendments. It will be quite impossible to give such a measure the political shade which mere politicians desire, and we greatly fear that any changes at this late day will prove fatal to its enactment.

Reviews.

Course of Lectures on the Physiology and Pathology of the Central Nervous System, delivered at the Royal College of Surgeons of England, in May, 1858, by E. Brown-Séquard, M.D., F.R.S. 1860. Philadelphia. J. B. Lippincott & Co.

Lectures on the Diagnosis and Treatment of the Principal Forms of Paralysis of the Lower Extremities, by E. Brown-Séquard, M.D., F.R.S. 1861. Philadelphia. J. B. Lippincott & Co.

(*Continued from page* 213.)

Long continued application of ice upon the part is the best means to treat burns. It prevents pain, and what is more important, the reflex influences which are so often the cause of death after burns. This treatment has given admirable results at the military hospital of Val-de-Grâce in Paris. Belladonna is the best narcotic in cases of burns, as it diminishes powerfully the reflex faculty of the spinal cord: opium, which on the contrary increases it, and congests the brain, must always be avoided.

It is not after an action of the poison on the nervous centres, but in consequence of changes produced locally in the nerves wounded by the bite, that the phenomena of hydrophobia occur. The convulsions follow a kind of *aura* (pain or other sensations) starting from the wound of the bite, or its cicatrix (which very often then gives way, and is replaced by a bleeding or suppurating wound). Therefore, the first thing to be done in hydrophobia, from a bite in a limb, would be to apply the tourniquet, or a very tight ligature, upon the principal artery of the limb above the wounded part. If the symptoms cease, the nerve supplying the wounded part should be resected. When the patient is seen a short time after the bite, besides resection of the nerve, a heated iron will be applied to the wound. If this has been inflicted in the head or trunk, the division of the nerve will be also practised. Led by these views Dr. W. Stokes, of Dublin, made the symptoms cease altogether in a patient attacked with hydrophobia: there were no convulsions so long as the tourniquet was applied to the limb, but they occurred at every time it was taken away. As the danger of producing gangrene prevented a constant application of the tourniquet, and amputation of the limb was not assented to, the patient ultimately died. Such a fact is important enough to encourage the trial of the rational treatment advocated by Dr. Brown-Séquard.

Let us pass now to the Lectures on paralysis of the lower extremities. Their main object is to show the existence of a reflex paraplegia due to irritations of the skin, the mucous and serous membranes, the abdominal or thoracic viscera, as well as the genital organs, or the trunk of the spinal nerves, entirely distinct from the other forms of paraplegia, not only in its symptoms but also in its rapid and frequent cure. Most cases of paraplegia can be classed in two different groups, according to the existence or absence of symptoms of irritation in the motor, sensitive, and vaso-motor nerves: to each group also corresponds a different category of therapeutic means pointed out by Dr. Brown-Séquard.

The principal features of two of the most characterized varieties of reflex and centric paralysis of the lower limbs, *i. e.* the paraplegia due to a reflex influence from the urinary organs, and the paraplegia due to myelitis, are thus exposed by Dr. Brown-Séquard:—

Urinary Paraplegia.	Paraplegia from Myelitis.
1. *Preceded* by an affection of the bladder, the kidneys, or the prostate.	1. Usually no disease of the urinary organs except as a *consequence* of the paralysis.
2. Usually lower limbs alone paralysed.	2. Usually other parts paralysed besides the lower limbs.
3. No gradual extension of the paralysis upwards.	3. Most frequently a gradual extension of the paralysis upwards.
4. Usually paralysis incomplete.	4. Very frequently paralysis complete.
5. Some muscles more paralysed than others.	5. The degree of paralysis is the same in the various muscles of the lower limbs.
6. Reflex power neither much increased nor completely lost.	6. Reflex power often lost, or sometimes much increased.
7. Bladder and rectum rarely paralysed, or at least only slightly paralysed. Urine usually acid.	7. Bladder and rectum usually paralysed, completely or nearly so. Urine frequently alkaline.
8. Spasms in paralysed muscles extremely rare.	8. Always spasms, or at least twitchings.
9. Very rarely pains in the spine, either spontaneously or caused by pressure, percussion, warm water, ice, etc.	9. Always some degree of pain existing spontaneously, or caused by external irritations.
10. No feeling of pain or	10. Usually a feeling as if

constriction round the abdomen or the chest.

11. No formication, no prickling, no disagreeable sensation of cold or heat.

12. Anæsthesia rare.

13. Usually gastric derangement.

14. Great changes in the degree of the paralysis corresponding to changes in the disease of the urinary organs.

15. Cure frequently and rapidly obtained, or taking place spontaneously after a notable amelioration or the cure of the urinary affection.

a cord were tied tightly round the body at the upper limit of the paralysis.

11. Always formications, prickling, or both, and very often sensations of heat or cold.

12. Anæsthesia very frequent, and always at least numbness.

13. Gastric digestion good, unless the myelitis has extended high up in the cord.

14. Amelioration very rare, and not following changes in the condition of the urinary organs.

15. Frequently a slow and gradual progress towards a fatal issue; very rarely a complete cure.

The differential characteristics between chronic meningitis and spinal congestion may be resumed as follows:—

Chronic Meningitis.	Spinal Congestion.
1. Pain usually of a rheumatic character, more or less diffused along the spine, and increased by every movement of the spine.	1. Slight pain in the spine, hardly increased by pressure.
2. Acute pain at the origin of the nerves proceeding from the parts of the cord where the meninges are inflamed, also increased by movement.	2. Formication alternating with numbness of the skin in the limbs at the beginning of the affection, from irritation in the origin of the nerves.
3. Frequent or constant spasms in the muscles of the limb augmentcd with the movements.	3. Greater degree of paralysis after a night's rest than in the course of the day, from the augmented congestion of the cord.
4. Variable degree of paraplegia, due to rapid changes in the quantity of cerebro-spinal fluid, or in the meningitic congestion.	4. Slight spasmodic movements in some of the paralysed muscles. Usually paralysis extending to some of the respiratory muscles, and to the upper limbs, or to the lower ones, when it begins upwards.
5. Spasm of the sphincter of the bladder, preventing the evacuation of the urine, sometimes followed by a paralysis of the sphincter. No alkalinity of the urine.	5. Bladder and rectum more paralysed in this than in the other affections. No alkalinity of the urine.
6. Anæsthesia rare; sometimes hyperæsthesia.	6. Frequent hyperæsthesia.
7. Reflex movements increased.	7. Reflex movements lost or difficult to produce.
8. Alterations of the paralysed muscles, and the skin usually not very marked.	8. Usually sloughs in the sacrum and nates.

Hæmorrhage and softening in the spinal cord do not rarely coexist, inasmuch as the same morbid condition of blood-vessels is the ordinary cause of both affections. The sudden appearance of the paralysis, the pains in the spot of the hæmorrhage, and a complete paralysis of the bladder and rectum from the very beginning, distinguish the first from the second of this affection. When hæmorrhage takes place in the grey matter of the cord anæsthesia is complete from the commencement, and the temperature of the paralysed limbs increased. Myelitis often supervenes in the parts of the cord surrounding the clot. Hæmorrhage and softening in the cord are incurable diseases; yet the latter may be arrested in its development, and even improved, whilst the former is of grave prognosis, on account of its easy reproduction, and its attending symptoms.

Paraplegia admits two sorts of treatment:—

1°. In paraplegia with symptoms of irritation of the motor, sensitive, and vaso-motor nerve fibres of the spinal cord, or of the roots of its nerves, the treatment consists in the use of some of the following means:—Belladonna, ergot of rye, hyoscyamus, stramonium, Indian hemp, dry cupping, blisters, moxas, issues, the hot douche, and also, sometimes, the iodide of potassium, ammonia, sulphate of quinine, iron, or cod-liver oil.

2°. In cases of paraplegia without symptoms of irritation of the spinal cord, or of the roots of its nerves, the rational treatment consists in the use of strychnia, sulphur, the cold douche or shower bath, and also of the iodide of potassium, and frequently ammonia, quinine, and iron.

Now in reflex paralysis the details of the treatment should be:—

a. To prevent the peripheral irritation, by the use of narcotics applied to the organs from which it starts. No narcotic is more powerful than belladonna, but as it diminishes the reflex power of the spinal cord it would be very unwise to make a constant use of it.

b. To improve the nutrition of the spinal cord, the patient every night, and in the course of the day, should lie down on his back, placing the head, arms, and legs on high pillows. As internal means strychnine is the remedy which deserves most confidence to augment the vital properties of the nervous centres, because it increases the amount of blood in the spinal cord, and it acts also in a direct manner on its tissue.

c. To prevent the ill effects of rest in the paralysed nerves and muscles the means consist essentially in the application of galvanism, of shampooing, and of the hot douche to the lower limbs. Besides, the voluntary power over the paralysed muscles must be exercised frequently. As regards hygienic rules nutritious food, a little wine or ale, are to be prescribed, together with moderate exercise in the open air.

(To be Continued.)

The Principles and Practice of Obstetrics, by Gunning S. Bedford, A.M., M.D, Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York; author of "Clinical Lectures on the Diseases of Women and Children." Illustrated by Four Colored Lithographic Plates and Ninety-nine Wood Engravings. Second Edition, carefully revised. New York: William Wood, 389 Broadway. 1862. 8vo. pp. 763.

This able work is now so well known to the professional public, and it has been so fully noticed in all the medical journals of the country, that it is unnecessary to give an extended analysis of its contents. The fact that it has already passed to a second edition within the brief space of four months from the day of publication, is decisive evidence of its high appreciation by the profession of our country; especially at such a time as the present, when all sciences are at a discount, except those more particularly connected with the art of war. However flattering such a fact may be to the worthy and industrious author, it is but a just tribute to the extraordinary merits and utility of the work. No treatise on obstetric science and art has received such high and universal commendation by the medical press of this country and of Europe. Such testimony, therefore, fixes its status as a national work of the first importance and value.

The striking and prominent characteristics of the book are:—Its great simplicity; its rare felicities of style, constituting it one of the most readable of scientific works; its admirable plan and systematic arrangement of subjects; the thoroughness with which they are treated; the complete mastery of the science and art of obstetrics, and the profound research displayed by the author in every part; the

soundness, judiciousness, and conservatism of the views presented; its beautiful symmetry of proportion, every topic being investigated according to its practical importance; the just and impartial judgment with which all controverted points are discussed; the fine enthusiasm and love of science, combined with a beautifully sincere and high appreciation of the noble qualities of woman, equally creditable to the heart and head of the writer; the rare and extensive personal experience, strongly marked individuality, and thorough acquaintance with all facts, discoveries, and researches, bearing on the art and science of obstetrics. In all these respects, in matter and arrangement, in philosophic views, in elegance as well as eloquence of expression, there is no work in the English language on the same subject which, in our judgment, can compare with it. This may seem extravagant praise to those who have not made themselves extensively acquainted with the various treatises on this subject, but to those who have, its truth will be readily acknowledged.

To be praised by foreign journals is the highest possible proof of merit in an American scientific work. The *Edinburgh Medical Journal*, for example, says of it: "We can give Dr. Bedford's book no higher praise than to say that, as a whole, it is remarkable among its cotemporaries for soundness in scientific views, readableness as a literary composition, and worth as a guide of practice." The same journal also speaks of it as "far excelling the generality of text-books on midwifery." In this last respect the work is unquestionably to be ranked *first* among kindred publications on this branch of science. Such a work should be clear, comprehensive, and philanthropic; and especially should it incorporate, in the fullest manner, the practical details of the lying-in chamber. This has been most successfully accomplished in Dr. Bedford's "Principles and Practice of Obstetrics." The book is not only a perfectly safe and enlightened guide to the practitioner, but it meets in the most satisfactory manner every exigency which may arise in the parturient room. What particularly pleases us is his uncompromising vindication of *Conservative Midwifery*, which is no trifling merit in these days, when the love for interfering with nature's inimitable processes seems paramount. Indeed, Dr. Bedford's teachings are most timely, for some such lessons as he inculcates were needed to arrest the oftentimes cruel and unjustifiable resort to instruments.

A careful examination of the work cannot fail to satisfy the reader that the author is, in every particular, thoroughly posted up to the existing state of obstetric science. His familiarity with the French school has enabled him to present whatever is valuable in French medical literature for this department of science, and the same of other foreign countries. The book exhibits abundant internal evidence of intense labor, and the most extensive research.* For these and other reasons, already stated, we have no hesitation in commending the book to both student and practitioner, as the ablest, safest, and most enlightened guide on the art and science of obstetrics accessible in the English language.

PEEKSKILL. C. A. L.

Correspondence.

AMAUROSIS WITH TÆNIA.

[To the Editor of the American Medical Times.]

SIR:—The incidental allusion of Dr. M. GONZALEZ ECHEVERRIA, in your issue of the 29th of March, to the fact that "amaurosis, deafness, aphonia, have been immediately cured after the expulsion of a tænia," reminds me of an interesting case which came under my observation three years ago. I present the history of it as prepared for *Prof. A. Clark's Clinic*, at the time.

The patient, James Brown, is a colored man, 39 years old, occupation waiter, born in Maryland. His habits have been pretty regular, and his health good, until six months ago, when he suddenly began to suffer severe pain through the right eye, and over the right side of the face and head. About this time, a day or two, he thinks, after the pain began, he discovered that he had paralysis of the right side of the face. The pain continuing, most severe through the globe of the right eye, he soon began to experience a cloudiness of vision as though a thin veil or mist was interposed between the eye and object of vision. For the first few days all objects viewed with the right eye alone seemed of a bright yellow color. The befogging of sight in that eye gradually deepened in intensity, until at the end of five or six weeks its power of vision was entirely obscured. Now began a similar set of symptoms in the left eye; pain through the globe and over the supra-orbital ridge, without extending, however, so generally over that side of the face and head, and followed by no paralytic effects, dimness and uncertainty of vision, resulting finally in total loss of sight in this eye also. This condition was reached in about four months after the first attack, and continued unaltered when two months later the patient first came under my care. At this time the eyes had a staring, vacant aspect, the globes being prominent as if pressed forward from within; the pupils were largely dilated, and but little sensible to the effect of light. There were no evidences of any disease in the external tunics of the eyes. The deeper portions, as seen through the pupils, presented a greenish or glaucomatous color. Paralysis of the muscles of the right side of the face, with partial paralysis of the tongue, still existed, and pain similar in character, though much less severe than that which had ushered in the disease, still continued. He also described a troublesome sensation as of "something crawling about on the top of his brain." Had chanere four years before, but had never suffered from any consecutive symptoms. Bowels sluggish; appetite rather inordinate. A few days after this first examination he spoke to me of having passed from his bowels pieces of "something white," which afterwards were found to be joints of tapeworm. He had observed similar joints mingled with fæcal matters almost constantly for three years. Two ounces of pumpkin seeds, grated, were administered to him upon an empty stomach, and followed in eight hours by a dose of castor oil and turpentine. This resulted in the expulsion of a tænia solium nineteen feet long. Two or three days after this event he began to distinguish shadowy, indistinct outlines of objects moving around him, and from this time the haze rapidly cleared away from his vision, so that within a week more he could see plainly enough to recognise his acquaintances. At this time it was observed that the power of vision was returning only to the right eye, the one which had first suffered. The iris of this eye had regained its activity, and the pupil was much smaller than the other, which remained fixed and dilated as when first seen. The globe was also less prominent than that of the blind eye.

After a short time, however, say two weeks subsequent to the expulsion of the tænia, the left eye began also to show evidences of returning vision. The same phenomena of restoration which had been observed in the right eye were repeated in the left. At the end of thirty days the patient could see well enough to read the newspapers; the pain had mainly disappeared, and both eyes had a perfectly normal appearance, save the glaucomatous hue of the inner chambers, which still existed. Paralysis continued, but was somewhat less evident. Two years and a half later the patient's sight still remained unimpaired, or nearly so, and the paralytic effects had all disappeared.

The treatment adopted before the existence of the tænia was known consisted in the administration of the iodide of potassium in an aperient mixture, and repeated vesication over the mastoid process. This was continued without change until the full recovery of the patient.

Yours etc.,

O. O. BURGESS, M.D.

NEW YORK, April 2, 1862.

APPOINTMENTS.

NEW YORK HOSPITAL.—*Surgical Division.* Drs. G. R. Cutter and Alfred North, *Resident Surgeons;* Drs. F. D. Sturges and Jno L. Kennedy, *Senior Assistants;* Drs. S. A. Jenkins and F. P. Foster, *Junior Assistants. Medical Division.* Dr. M. K. Hogan, *Resident Physician;* Dr. Nornand Smith, *Senior Assistant;* and Dr. C. E. Baker, *Junior Assistant.*

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 7th day of April to the 14th day of April, 1862.

Deaths.—Men, 99; women, 73; boys, 111; girls, 110—total, 393. Adults, 172; children, 221; males, 210; females, 183; colored, 7. Infants under two years of age, 146. Children reported of native parents, 26; foreign, 171.

Among the causes of death we notice:—Apoplexy, 6; Infantile convulsions, 24; croup, 17; diphtheria, 7; scarlet fever, 27; typhus and typhoid fevers, 0; consumption, 66; small-pox, 6; dropsy of head, 23; infantile-marasmus, 21; diarrhœa and dysentery, 0; inflammation of brain, 10; of bowels, 9; of lungs, 25; bronchitis, 5; congestion of brain, 9; of lungs, 6; erysipelas, 8; whooping cough, 11; measles, 0. 206 deaths occurred from acute diseases, and 88 from violent causes. 270 were native, and 123 foreign; of whom 81 came from Ireland; 2 died in the Immigrant Institution, and 54 in the City Charities; of whom 16 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

April, 1862	Barometer.		Temperature.			Difference of dry and wet bulb. Thrm.		Wind.	Mean amount of cloud.	Humidity Sat'tion, 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In.	°	°	°	°	°			
6th.	30.00	.20	46	37	55	9	13	W.	1	500
7th.	30.15	.20	40	30	50	7	11	N.W.	4	601
8th.	29.94	.20	30	27	35	2	3	N.E.	10	810
9th.	29.70	.30	30	26	34	2	3	N.E.	9	810
10th.	29.90	.30	33	26	40	5	7	N.W.	1	651
11th.	30.20	.11	41	28	54	10	15	N.W.	.03	410
12th.	30.26	.10	44	32	55	11	17	N.W.	.02	390

REMARKS.—6th, Fine. 7th, Ice A.M.; P.M. cloudy. 8th, Snow P.M. 9th, Snow storm P.M., with a gale of wind all night. 10th, 11th, and 12th, Fine days. Strong winds prevailed all the week. Melted snow during the week 0.4 inch.

MEDICAL DIARY OF THE WEEK.

Monday, April 21.
- NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M.
- EYE INFIRMARY, 12 M.
- OBSTETRIC SECTION, 8 P.M.

Tuesday, April 22.
- NEW YORK HOSPITAL, Dr. Markoe, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

Wednesday, April 23.
- NEW YORK HOSPITAL, Dr. Griscom, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Sayre, Is. Hos., half-past 1 P.M.
- " " Dr. Flint, Is. Hos., 3 P.M.
- EYE INFIRMARY, 12 M.
- NEW YORK PATHOLOGICAL SOCIETY, 8 P.M.

Thursday, April 24.
- NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Elliot, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

Friday, April 25.
- NEW YORK HOSPITAL, Dr. Markoe, half-past 1 P.M.
- EYE INFIRMARY, 12 M.
- BELLEVUE HOSPITAL, Dr. McCready, half-past 1 P.M.
- SURGICAL SECTION, Dr. Wood, 2 Irving Place.

Saturday, April 26.
- NEW YORK HOSPITAL, Dr. Griscom, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Wood's Clinic, 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M.

BELLEVUE HOSPITAL MEDICAL COLLEGE.

ORDER OF LECTURES IN SPRING SESSION, 1862, FOR THE WEEK ENDING APRIL 26.

Monday, PROF. MOTT, 12 M.
Tuesday, PROF. ELLIOT, 12 M.
Wednesday, PROF. SAYRE, at Island Hospital, 2 P.M.
Wednesday, PROF. FLINT, at Island Hospital, 3 P.M., (steamer leaves at 1½ P.M.)
Thursday, PROF. WOOD, 12 M.
Friday, PROF. SMITH, 12 M.
Saturday, PROF. FLINT, JR., 12 M.
Clinical Lectures by PROF. TAYLOR, Thursday, 1½ P.M.
" " by PROF. MCCREADY, Friday, 1½ P.M.

The order of Lectures for each week will be published in the AMERICAN MEDICAL TIMES.

SPECIAL NOTICES.

OBSTETRIC SECTION.—*A regular meeting of the Section will be held at the residence of the Chairman,* DR. S. T. HUBBARD, *No. 47 Ninth Street, on Monday evening, the 21st inst., at 8 o'clock precisely. The discussion, on "Breech Presentations," will be opened by* DR. ALFRED UNDERHILL.

SECTION OF SURGERY AND SURGICAL PATHOLOGY.—*The stated monthly meeting of the Section of Surgery and Surgical Pathology of the New York Academy of Medicine will be held at the house of the Chairman,* DR. JAMES R. WOOD, *No. 2 Irving Place, on Friday evening, the 25th inst., at 8 o'clock P.M. Subject for discussion, "Tracheotomy." All business communications must be addressed to the Secretary,* DR. JOHN P. GARRISH, *No. 40 West 21st st. The Secretary most respectfully solicits from members of the profession, to communicate to him any information and experience which they may have had, as a source or means of saving life in croup, and in all the kindred affections of the larynx and trachea.*

DR. GARRISH *will operate for Cataract at the Hospital No. 63 Third Avenue, on Tuesday, the 22d inst., at 2 o'clock P.M. Students of Medicine are invited to attend.*

Wm. H. Davol, M.D., late Physician to L. I. College Hospital, Brooklyn, removed to St. Paul, Minn. *References.*—C. L. Mitchell, M.D., T. L. Mason, M.D., Prof. E. N. Chapman, M.D., of Brooklyn; Prof. Austin Flint, M.D., Prof. B. F. Barker M.D., of New York.

John W. Shedden, Apothecary, 363 Bowery, cor. 4th St.
Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

P. W. BEDFORD,
PHARMACEUTIST,
REMOVED TO
745 *Sixth Avenue, near Forty-fourth Street,*
Opposite Sixth Avenue Railroad Depot.

FINKLE & LYON

Sewing Machine Co.
538 Broadway, New York.
Descriptive Circulars with Samples of Work will be sent mail free.

Having just completed the most successful season's business they have ever enjoyed—wherein they have demonstrated that, *for all kinds of work,* they have "THE SEWING MACHINE OF THE WORLD"—enter upon the New Year with still more IMPORTANT IMPROVEMENTS, the latest being their

"NEW TAILORING MACHINE."

Having heretofore aimed almost wholly to supply a Family Machine, which should do all kinds of family sewing, and HAVING SUCCEEDED, we now enter the market with a Manufacturing Machine, which, for elasticity and strength of stitch—for rapid movements—for simplicity and durability, defies competition. While adapted to make the HEAVY ARMY AND NAVY COATS, with linen thread, it can, by a slight change, be made to do the fine family sewing; thus combining in one machine adaptation to FINE FANCY SEWING and HEAVY MANUFACTURING. This can be best appreciated by those who have owned and operated machines. We do not ask or expect the public to be governed by our statements alone. *We court investigation,* and refer to the thousands who have our machines in successful operation.

FINKLE & LYON SEWING MACHINE CO.,
538 Broadway, New York.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical; and of a great convenience for *Physicians (principally country Physicians) Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bourbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Grannie contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Grannies daily.

LABELONYE, Phen., 19 Rue Bonrbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyosciamus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragee contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Tronseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.
By SAMUEL R. PERCY, M.D.,
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE VI.—PART I.

RESINA PODOPHYLLI (PODOPHYLLIN).

Gentlemen:—The subject of which we shall now treat is the resinous and active medicinal principle of the root of the Podophyllum Peltatum.

The plant grows wild in every State of the Union, and is known by the names of mandrake, wild lemon, may apple. It is generally found upon the borders of the woods, growing in the damp and leafy soils, where the roots can spread freely in a lateral direction. In the northern states the plant grows eight or ten inches high, but in the southern states it is larger, and may frequently be seen twelve to sixteen inches in height. The root is perennial, creeping, and frequently many feet in length. Sometimes a patch of plants of several yards in diameter will be found, the whole of the roots connected together. The root is about a quarter of an inch in diameter, jointed, and of a light brown color. The plant flowers in May and June, and ripens its fruit about September. The fruit is of a light lemon color, about the size of a hen's egg, and contains a thick mucilaginous pulp, which is of a pleasant sub-acid, sweetish taste, and is eagerly sought for by the country children. The green leaves are said to be narcotic, but I much doubt whether they contain any narcotic properties. In the green state the plant contains a volatile substance which is entirely dissipated on drying, and what little knowledge I have gained of its properties in this state would lead me to class it as an acrid emetic and cathartic. The leaves and stalk when dry are inert, and the whole of the medicinal activity resides in the rhizoma. A full description of its botanical characteristics may be found in Willd Sp. Plant. ii. 1141 ; Barton Med. Bot. ii. 9 ; Carson's Illust. Med. Bot.; U. S. Dispens., p. 605.

The podophyllum root was a favorite cathartic remedy with the Indians before the occupation of this country by the Europeans. It was usually used by them in decoction, and aromatic roots and barks were added to it to avoid its griping properties. The root has been used by the colonists ever since their settlement in this country; it has been used in decoction, in powder, in tincture and extract, but its true properties seem to have been little understood until the isolation of its active or resinous principle.

Numerous monographs have, from time to time, been written on the plant, and much argument has taken place, and much feeling has been displayed as to who first discovered and recommended the resinous principle. Upon this subject we will not touch, for as our time is brief it can be better occupied in studying its chemical composition and therapeutical applications.

The name applied to the resin has hitherto been podophyllin, but it is understood that in the forthcoming new edition of the U. S. Pharmacopœia it will be known by the name of resina podophylli; we will, therefore, treat of it under this more correct name; more correct, because it designates its composition.

Preparation of the Resin.—Most of the resin now in the market is prepared by manufacturers upon the large scale, and is in the hands of a few individuals. Its preparation in the large way differs from that adopted by the analyst or pharmacist.

When prepared in the large way the root is powdered, moistened with alcohol, and packed in a displacement apparatus, and exhausted with boiling alcohol. The strong tincture thus obtained is distilled to a proper density, and allowed to flow in a small stream into six or seven times its quantity of cold water, to which has previously been added about one per cent. of hydrochloric acid. It is kept continually stirred until all the alcoholic tincture is thoroughly mixed with the water, and it is important, for ready separation of the resin, that the evaporation has been conducted to just the proper point, for if too much alcohol remains a large quantity of water is required, whereas, if the evaporation is too concentrated, it is apt to fall into the water in lumpy masses which do not allow the alcohol to separate freely from them. After being allowed to stand for some time to separate, the whole is thrown upon flat stretched filters, and the whole of the liquid allowed to drain off. When sufficiently drained and washed it is thrown upon trays and carried to the drying-room, and left there until it is dry enough to powder. A considerable quantity is generally collected before it is powdered, as it is an operation much dreaded by the workmen, as the powder is excessively irritating to the eyes, nose, mouth, respiratory organs, and even to the skin. Even with all the improvements in the apparatus for powdering and sifting the workmen are frequently sick for some days after attending to the powdering of this resin.

When made by the pharmacist in the small way, or by the analyst, the finely powdered root is moistened with alcohol, and packed in a displacement funnel, and a disc of filtering paper placed over the surface. Alcohol is now added, and it is generally allowed to stand twenty-four or more hours before it is allowed to filter off. As soon as filtration commences more alcohol is added, until it is sufficiently exhausted; generally about two pints of alcohol will be found sufficient to exhaust a pound of the root, but as upon the small scale a small quantity of resin can better be lost than a large quantity of alcohol it may be at any time known when to stop the addition of the alcohol; for as the tincture passes through the displacement funnel it may be dropped into slightly acidulated water, and the amount of resin in suspension may be thus ascertained. In evaporating this tincture it is well not to employ too great a heat, otherwise the product will be dark colored; the evaporating dish should therefore not be buried too deeply in the sand bath. As evaporation progresses the resinous substance which collects upon the edge of the dish must be rubbed off, and kept mixed with the fluid, and evaporation must not be allowed to proceed too far. The weight of the evaporating dish had better be known, so that uniformity can be nearly arrived at; and if the amount of alcohol above mentioned has been added to a pound of the root, about four oz. by weight of the evaporated tincture may be considered concentrated enough to arrest the process. This, while still hot, is poured in a very fine stream into twenty oz. of ice-cold water, which is constantly stirred with a stout glass rod, and when the whole is added it is set aside for twenty-four hours. It is then thrown on a linen filter, and washed with ice-water, allowed to dry as much as possible, and then rolled into sticks, in which form it may be dried and powdered as wanted.

Mr. Edward Parrish, who has written a very able article on this resin, and which has just appeared in the *American Journal of Pharmacy*, says, that he has experienced some difficulty in the separation of the precipitate, and recommends that the water in which it is thrown should be brought just below the boiling point when the resin fuses and collects on the bottom and sides of the jar. While in this state, he says that it may be kneaded and pulled out, so as to wash it thoroughly and make it lighter in color. He prefers to leave it in lumps or pieces, as it is in this state more characteristic, and less liable to adulteration.

The precipitation takes place more perfectly and readily if one or one and a half per cent. of hydrochloric acid is added to the water, or if a small quantity of alum is dis-

solved in the water before the addition of the concentrated tincture; but I have used clear water, because with it there is a small amount of another principle to be separated. After the precipitation has taken place, if to the filtered water a small amount of acetate of lead is added, a precipitation takes place of a light brown powder, which may be washed in a small quantity of water acidulated with acetic acid, and with water, and dried: this has been called the neutral principle. Of its therapeutic action we will speak hereafter.

The resin as obtained by the processes above mentioned is of a yellowish brown color, nearly all soluble in alcohol; about 75 per cent. of it soluble in ether; and wholly soluble in a hot solution of caustic alkali; insoluble in cold solution of the carbonate and bi-carbonate of soda and potash. With the caustic alkalies it forms a soap like other resins, but it may be easily separated from its solvent by the addition of an acid. It is decomposed by sulphuric acid, and by strong nitric acid also, with effervescence, forming a reddish iodine colored liquid. It is in the books said to be entirely soluble in alcohol; but in endeavoring to purify it, and make it of a lighter color by repeated solutions in alcohol and precipitations in water, I have found there is at each solution a portion of resin entirely insoluble in cold alcohol, and by repeated precipitations the whole may thus gradually be rendered insoluble in alcohol. What the exact chemical change is which takes place by the precipitation I will leave to abler chemists to determine, but I suppose a portion of it unites with the water as a base, forming a hydrate. The same results are noticed with the resinous principles of many other of the indigenous remedies which I have experimented upon.

The amount of the resin soluble in ether varies in different samples, ranging from 50 to 80 per cent.; and from some examinations made by Mr. Tilden, he states that there is a great difference in the solubility of the resin in ether, in podophyllin made from roots collected in the spring and in the autumn. Thus in the resin obtained from spring roots fifty-four parts in one hundred were soluble in ether, while in that obtained from autumn roots but forty parts in one hundred were soluble in ether.

The ether used in these experiments must, I fear, have been impure, for the amounts of the resin soluble in that menstruum are very much smaller than usually obtained. From some experiments made by Mr. Wm. Parrish, eighty-five parts of the resin made by him were soluble in ether, and on an average I find it will amount to seventy-five parts. The resin soluble in ether is far more active than that insoluble in that fluid.

There is a difference in the amount of the resin obtained from the root at different periods of its growth. That gathered in June was found by Mr. Parrish to contain more resin than that gathered in September. The amount of resin obtained by large manufacturers will vary from three to five per cent.

During 1860 and 1861, M. Civiale has operated in 120 cases of stone, in 115 men and 5 women. 88 were cases of lithotrity; of which 3 died and 79 were cured. 17 patients were lithotomized; of whom 8 were cured, 2 recovered with fistulæ, and 7 died. 15 cases were not operated upon; of these, 6 died, and 9 remained alive.—*Brit. Med. Jour.*

Drs. Algernon Coolidge of Boston, William O. Johnson of Cambridge, William D. Lamb of Lawrence, and Dr. B. B. Breed of Lynn, have left for Washington, whither they had been summoned, in anticipation of the great addition to the labors of the Surgical Staff likely, within a few days, to grow out of the movements in Virginia.—*Boston Journal.*

St. Vincent's Hospital.—During the year 1861, 665 patients have been treated in this institution. Of these 279 were cured, 207 relieved, 65 unrelieved, and 114 died.

Original Communications.

INVERSION OF THE UTERUS,

OF THIRTEEN YEARS' STANDING,

WITH A NOVEL METHOD OF REDUCTION.

[Being a Paper read before the N. Y. Academy of Medicine, March 5, 1862.]

By E. NOEGGERATH, M.D.,

NEW YORK.

The object of this paper on inversion of the uterus is twofold. First, to report the successful performance of an operation for inversion, in an instance where displacement had existed for a longer time than in any of the cases reported in which an operation had been attempted. And again, the surgical manœuvre adopted differed from those formerly resorted to, and claims the preference over other methods hitherto employed. For which latter assertion I find the best proof in the fact, that two operations had been previously attempted in France without affecting a change in the relative positions of the dislocated sexual organs, in the case to which I call your attention. The history of the case is briefly stated as follows:

Madame Victorine Reauté, born in Bourbon, arrondissement Dunquirque, department du Nord, France, now a resident of this city, is 38 years old, of dark complexion, and although very much reduced by a sickness of long standing, endowed with a good deal of physical energy. Born of healthy parents, she enjoyed a very satisfactory state of health up to the time of her marriage, which occurred when she was twenty-two and a half years old. She had her first menstrual discharge at the age of fifteen, which, up to the time of her first gestation, had continued as normal as could be desired. She was married on the 16th of July, 1846, at the city of St. Omère, department de Pac de Calais. She soon afterwards became pregnant, and was taken with the first labor pains during the night of the 16th of April, 1847. The pains went on, gradually although very slightly increasing until nine o'clock A.M. of the following day, when they suddenly and unexpectedly seized her with such violence that the child's head began to enter the os externum, while Mrs. R. was still walking the floor. All she had time to do was to throw herself in the lap of her husband, in which posture she gave birth to the baby, which is alive at the present day. The husband was seated on a chair, while the doctor, kneeling in front of her, received the child in his hands. No hæmorrhage followed this sudden evacuation of the uterus, but when there were no signs of detachment of the placenta fifteen minutes afterwards, the doctor requested the patient to bear down in order to promote its discharge. Immediately after this order was given, and before the patient had fairly obeyed it, and while the doctor had passed his hand inside of her, she felt something unusual take place in her abdomen, which made her faint away instantly. In this state of unconsciousness the woman remained from nine o'clock A.M. till twelve at noon. She was then able to speak a few words, but soon relapsed into the same condition, and was considered to be dying by all around her. The patient recollects having been flooded all this time, and most profusely in the first three hours, after which time the violence of the hæmorrhage was somewhat checked by a lemon, which the doctor had introduced into the vagina.

On the following day, the patient found herself in a feverish and very reduced state, with symptoms of inflammation of the bowels. All that she knows of the medical treatment is the application of mercurial ointment. For two months her life hung by a thread, and all this time she was kept in a position, the feet elevated, and the head depressed, while blood was oozing constantly from her womb. Several physicians were called in, and although they were well aware of the existing inversion of the uterus, none of them dared to attempt a replacement, on account of the exhaustion of the patient.

It was not until within a year after the occurrence of the accident, that her attendant tried to reduce the inverted uterus. Drs. Evrard, Bertrand, and Reveil, performed two different and distinct operations on her in 1848. The instruments used on the first occasion, were a four-bladed speculum, and a rectum-bougie. The second attempt was made by dilating the vagina with a spatula and manipulation with the hand passed into the same; no chloroform was used. The result was none as to the position of the displaced organ, while the hæmorrhage was worse than before, so that she had to remain in bed for three weeks before she could regain her former strength, and, when she had begun to walk around, a new complaint was added. The womb, which had hitherto remained inside, came down so as to show outside the parts; and although it could be easily pushed upwards, whenever it had come down, her ailments, and more especially the hæmorrhage, were considerably increased by this occurrence. The prolapse, however, gradually disappeared, and she has never been troubled with it for the last eight years. After those unsuccessful attempts at reduction, the treatment of her case was restricted to the use of astringent injections, with a view of controlling the flooding. In 1851, Mrs. R. left her country for New York. She has had ever since a considerable flow of blood for at least thee weeks in each month, which then subsided for the remainder of the period, and then gave place to a whitish serous discharge. For the last three months, she was treated by a physician of considerable repute in this city, who applied the lunar caustic to the bleeding surface twice a week, during which application the flooding became rather worse.

On the 22d of February, 1860, I was called upon by the husband of the patient to see her on account of a severe attack of headache, from which she had been suffering occasionally for many years. While inquiring into the nature of the complaint, Mrs. R. made a casual remark of her being troubled with hæmorrhage from the womb, intimating at the same time that she had no desire to have my attention directed to the latter, because, after all she had gone through, she thought her complaint past all hopes of recovery. This latter remark arrested my attention, and I began to examine more closely into the nature of that hæmorrhage. As both Mr. and Mrs. R. were very intelligent people, and even at the present day perfectly au fait with the particulars of the case, I soon came to the conviction that the cause of the hæmorrhage could be nothing short of an inversion of the womb. After having brought to bear all possible means of persuasion, I was at last permitted to perform a vaginal examination.

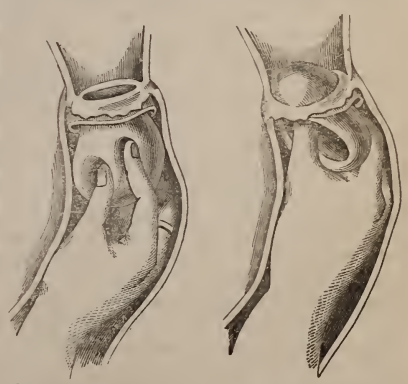
This was done on Saturday, the 25th of February. The patient having been placed in a convenient position, I passed my forefinger into the vagina, which was unusually distended, and met there with a tumor, the lowest point of which was situated about one and a quarter inches above the vulva. It had a very soft feel, was somewhat compressible, of a pear-like shape, and about three inches long. Several parts of it, *when slightly scratched with the nail of the finger, gave rise to a sharp pain*, which was experienced by the patient in the left iliac region close by the anterior iliac spine. The vaginal neck was about half an inch long, and the os uteri open and pierced by the upper portion of the tumor.

On passing the finger around the upper extremity of the mass, between the latter and the inner margin of the lips of the cervix, the constriction of the os uteri was found to be so perfect that it could not be ascertained in what portion of the uterine canal or to what extent the pedicle was inserted. In order to decide this very important question, the womb-sound was now introduced into the vaginal neck, and after a most careful examination, during which the instrument was made to traverse around the entire surface of the cervical segment of the tumor, I became convinced that the sound could nowhere be introduced further than half an inch. After withdrawing the probe, I once more passed my finger over the exterior surface of the tumor, and then I could distinctly feel two small circular grooves at the base of the tumor. They were of the size of a pin's head, one located on the right, one on the left side, and about one inch and a half apart from each other. I now passed a male catheter into the bladder, and the right fore-finger into the rectum, and after turning the instrument so as to have its concavity look downwards, my finger met the point of the catheter, and so distinctly could the same be felt, that the absence of the body of the uterus in the abdominal cavity became at once evident. The physical signs thus gathered, taken in connexion with the data I derived from the statement of the patient, led to the diagnosis of chronic inversion of the uterus.

I at once proposed to have another operation performed. The patient yielded reluctantly, recollecting that two unsuccessful attempts had been made by eminent French physicians. She thus considered her disease beyond the reach of surgical skill, the more so, because more than twelve years had elapsed since the last operation had been performed. The probability, however, that a third operation would be followed by a better success than the two former ones, could not be denied. I had at my disposition not only improved methods for the surgical treatment of inversion, but, what is of more importance, the use of anæsthetics.

On Sunday the 4th of March, 1860, in the presence of Drs. Jacobi, Krackowizer, Kammerer, and Schnetter, the patient was placed in the position for lithotomy, and brought under the influence of chloroform. The method which I intended to use for the reduction of the uterus was that proposed by Prof. White, of Buffalo.

The right hand was introduced into the vagina, and the entire body and neck of the uterus was firmly grasped. At the same time I carried up a large rectum bougie, and also received it into my palm, holding it firmly in contact with the fundus of the uterus. Continuous gentle pressure was made upon the external extremity of the bougie with the left hand, whilst the right hand pressed the uterine tumor. In this way, the force was directed in the axis of the pelvic cavity, putting the vagina completely on the stretch. After persevering in this effort for some time, alternately slackening and increasing the force, and changing the position of



First Step of the Operation. Second Step of the Operation.

the fingers occasionally, I found that the tumor had not in the least altered its shape; and the tissue of the fundus, which was very soft and friable, began to give way at the point where the bougie pressed against it. I therefore attempted compression, and replacement without the aid of the instrument. This manœuvre, however, proved just as unavailing as the first trial. Almost discouraged by these fruitless efforts, and feeling that the strength of my right

arm was nearly exhausted, I was about to desist from any further attempts, when the idea struck me to proceed on a different plan of manipulation. I at once changed the position of my hand in such a manner, that the fore and middle fingers grasped the right section of the tumor; while the thumb was implanted on the left side at a point where the upper two-thirds of its length met the lower one. In this manner, a pressure was exerted by the thumb on the lateral border of the body of the womb, which pressure took an upward as well as a lateral direction, and resulted in the formation of an oblong groove, the long diameter of which pointed below towards the left horn of the uterine fundus, and upwards to the spot where the inverted and the non-inverted portion met on the left side. The object of this first step of the operation was to completely double up the uterine cavity, so that the right—now inner—wall touched the left one. After this was completed, the dimpled portion was carried upwards by the thumb, and in doing so it could be observed that the right side of the upper section of the inverted cervix passed first of all through and beyond the os uteri. During the progress of this manipulation, the right lower section of the uterine body followed, and re-assumed its normal position, while the opposite part of the fundus continued to remain outside the os, only much shortened and doubled up. As soon, however, as half of the tumor had disappeared inside the abdominal cavity, the intra-vaginal section slipped suddenly out of my fingers, and the operation was completed. The entire manœuvre was performed in a shorter time than it takes me to give its description. The entrance of the last portion of the uterus was so complete, that I deemed it unnecessary to introduce a bougie into the restored uterine cavity, with a view of preventing re-inversion.

After the patient had recovered her senses, she felt very weak and nauseated, in which condition she continued for the next twenty-four hours. Owing to a slight feverish reaction, she was not able to leave her bed for a full week. The operation checked the hæmorrhage at once, and in its place she remarked a moderate discharge of a thin serous liquid. Three weeks after the operation, the menses reappeared, and lasted seven days, the loss of blood being considerably less severe than it had been for many years back. A year afterwards, when I saw Mrs. Reautè for the last time, the position of the uterus was unchanged; pain, hæmorrhage, leucorrhœa had disappeared, and the appearance of the patient was considerably changed for the better.

The methods hitherto employed for surgical treatment of inversio uteri are twofold. One of them attempts reduction by reinverting that portion of the uterus which was the first to protrude. It consists in dimpling the uterine fundus, and its application is restricted to the treatment of recent cases, and to those exceptional cases of chronic inversion where the os uteri is in a state of relaxation. The longest case on record that had been successfully treated in this manner, is the one reported by Barrier, where inversion had existed for fifteen months. With regard to the other method, it may be said that it justly claims the preference over the one just mentioned for the treatment of the chronic form of the displacement in question. Its object is to reduce first that portion which was the last to be inverted; it acts very much in the same way as the operation for strangulated hernia. It is generally called the French method, inasmuch as Arnaud, Puzos, and Leroux were its first advocates. Dr. White's and Tyler Smith's manipulations are but a modification of the original plan as laid down by the above-named French physicians.

If we consider for a moment the object which we have in view whenever we intend to remedy a case of inversion of the uterus, we find that the mechanical process, whatsoever its nature may be, must tend to solve the problem of pushing a longer ring of about two inches diameter, through one of a diameter of half an inch, and less. The size and location of the larger of the two are represented by the intratubal diameter of the uterus, while the smaller one corresponds with the os uteri or rather the narrowest circumference of the cervical canal, which surrounds the intra-uterine portion of the inverted uterus. The object under consideration is accomplished whenever those two methods are applied, simply by effecting a gradual dilatation of the stricture above; the inverted portion is made to act as a wedge, either directly by choosing the French method, or indirectly by dimpling the fundus.

Now, this modus operandi would be unobjectionable, if the narrow inclosure through which the body of the uterus has to be passed, could always be forced upon. But this is not the case. The full strength of my arm proved insufficient, in the instance just related, to accomplish this object. Others have gone through the same experience, for we have quite a number of similar observations recorded in the medical journals of the last few years—a number of unsuccessful operations, performed by some of our most skilful and accomplished obstetricians. I therefore proceeded on quite a different plan. Instead of dilating the upper ring, it was my object to change the form and position of the lower one. To the circular intratubal disc was imparted an oblong form, the long diameter of which formed an acute angle with the horizontal axis of the uterus. Thus altered in shape, the lower portion of the body of the uterus was conducted through the narrow cervix, and instead of acting as a wedge upon the os uteri, the constricted portion itself sufficiently compressed the several sections of the uterine cavity, during their passage through the latter, so that the entire organ could be replaced to its normal position without the slightest difficulty. The great advantage of this method over those generally applied consists in the fact, that it does away entirely with the principal and only obstacle to the easy accomplishment of the operation—namely, the constriction of the os uteri; because the uterine tumor is thus so much reduced in size and brought under so favorable conditions, that only a very small portion at a time is pushed through the os. I will further mention that my method imitates the original process of inversion much more closely than any other manœuvre hitherto employed. Dr. Oldham, I think, was the first to call our attention to the fact, that it was not at the fundus proper that inversion commenced, but rather at one or the other of its cornua—that lateral portion of it, which receives the ostium uterinum of the Fallopian tube; an explanation which has found numerous advocates among our latest obstetrical authors. In reinverting the uterus, after the plan which I have just described, the first part that enters the pelvic cavity is the right horn of the fundus, thus following step by step the manner in which inversion is accomplished by nature. Up to the present time, I have only this one instance in which the new method could be tested. Considering, however, that the displacement had existed for thirteen years, and that three attempts at reduction had failed to succeed, I believe that I am right in asserting that my operation had stood a severe test. It is well known to every one of us that inversion of the uterus is one of the rarest accidents we are called upon to treat among the several chronic diseases of the female sexual organs, for reasons too obvious to mention on this occasion. If, however, any of the members of this illustrious body should happen to meet with a case of chronic inversion of the womb, I would ask him to give this modus operandi a trial, in order more fully to establish its true value.

Dr. John Stearns, Jr., of this city, and Mr. W. H. Mitchell, medical student, in answer to a summons from the Sanitary Commission, have gone to St. Louis for active service on board Gen. Halleck's floating hospital.—*Boston Journal.*

A meeting of the surgeons of the hospitals of New York and Brooklyn was held at the New York Hospital to make arrangements for the proper medical care of the wounded who arrive here.

DISLOCATION OF THE FEMUR INTO THE ISCHIATIC NOTCH.

REDUCTION BY MANIPULATION; DEATH FROM RUPTURE OF THE BLADDER; DISSECTION OF THE HIP.*

By JOSEPH C. HUTCHISON, M.D.,

PROFESSOR OF OPERATIVE SURGERY AND SURGICAL ANATOMY, LONG ISLAND COLLEGE HOSPITAL.

The chief interest of the following case depends upon the fact that an opportunity was presented for making a dissection of the parts injured by a dislocation of the femur backwards, after it had been reduced by manipulation.

Owen McLaughlin, a laborer, 40 years of age, while engaged in shovelling coal, was struck over the lower portion of the back, while in a stooping position, by the bucket of an elevator which fell from a considerable height, crushing him to the ground, or as he expressed it, "as far as he could go." He entered the Brooklyn City Hospital half an hour after the accident, while I was making my daily visit to the wards, with a dislocation of the right femur into the ischiatic notch. The limb was flexed upon the pelvis, adducted and rotated inwards, the great toe resting against the ball of the toe of the opposite side; it was shortened one inch. On elevating and adducting it the head of the bone could be felt on the ischiatic notch, the patient being very thin. The trochanter major of the right side was three-fourths of an inch nearer the anterior superior spinous process of the ilium than the left, and the lumbar portion of the spinal column presented the arched form described by Mr. Syme as characteristic of dislocation into the ischiatic notch. This symptom, he says, is never absent, always well marked, and not met with in any other injury of the hip-joint, whether dislocation, fracture, or bruise, and cannot be made to disappear so long as the thigh is straight or in a line with the patient's trunk. On either side of the spine, on a level with the crista ilii, the parts were bruised, showing where the bucket had struck. The patient was pale, with an anxious expression and feeble pulse, which excited a suspicion that some other more serious injury had been received. The pelvis and spine were carefully examined by myself, the House Surgeons Drs. Gleason and Blasdale, and Drs. Burge, Brady, and Samuel Hart, who were present, but no fracture could be detected.

I directed free stimulation and the hot air bath, for the purpose of improving his general condition before attempting reduction, and saw him three hours subsequently. He had now reacted somewhat, and in the presence of the gentlemen before named I proceeded to reduce the dislocation by what is commonly known as Reid's method. The patient was so fully relaxed that an anæsthetic was not used. The first two efforts failed, leaving the head of the bone in the ischiatic notch; the third time, the limb being more abducted than before, the head was thrown on to the foramen ovale, and the limb presented the signs characteristic of that dislocation. By reversing the movements it was easily replaced on the ischiatic notch. It moved backwards and forwards between these two points seven or eight times with the greatest facility. The manipulations were made with care and deliberation, flexion, adduction, and abduction being varied to every possible degree, with very little pain to the patient. During these efforts at reduction the pelvis was frequently examined, from a suspicion that it might have been fractured by the blow which produced the dislocation. I now had him etherized for the purpose of applying extension with the pulleys, and in the mean time having made the manipulations upon the skeleton, I came to the conclusion that when the head of the bone was brought opposite to the lower portion of the acetabulum it might be lifted over the margin into the socket. This expedient was adopted by lifting at the knee with my hands, and the reduction was thus at once accomplished. The same plan, I have since learned, was adopted by Prof. Hamilton in the case of John Caswell.*

On the following day, no urine having been passed since his admission, a catheter was introduced, and a small quantity of bloody urine drawn off. This symptom and the continued prostration induced me to believe that the bladder had been ruptured when the injury was received. He died on the fourth day after the accident.

Post-Mortem.—Present Profs. F. H. Hamilton and Enos, Drs. Minor, Hart, and others.

Dissection of the Joint.—On raising the gluteus maximus a considerable quantity of extravasated blood was found beneath it; that portion of the muscle situated over the tuber ischii was ruptured, so as to make a depression large enough to imbed the tuberosity. Gluteus medius and minimus uninjured; lower edge of the pyriformis, the gemelli, and the upper portion of the obturator externus lacerated; the capsular ligament lacerated through its posterior portion to one-half of its extent; round ligament torn from the depression on the head of the bone. The head was in its normal position in the acetabulum. On flexing the leg, which required considerable force owing to its rigidity, a fracture was revealed by a loud crack, which was found to extend from the upper portion of the ischiatic notch through the acetabulum. There was no displacement, and I believe the fracture was incomplete, but was made complete by the force which was used to bend the thigh. The *bladder* was ruptured at the fundus; no urine detected in the peritoneal cavity. Death caused by peritonitis.

This case is the only one that has come to my knowledge where an opportunity has occurred of dissecting the hip-joint in a recent dislocation backwards, *when the head of the bone had been restored to the acetabulum before death.* The pathological condition of the joint in this case corresponds with what has been observed in the few recorded cases where dissections have been made after this accident. But it would seem probable that the injury to the soft parts here must have been increased by carrying the head of the bone repeatedly backwards and forwards between the ischiatic notch and foramen ovale.

If the pulleys had been applied, as was my intention when I directed the patient to be etherized, the fractured pelvic bones would have been torn asunder, and death must have resulted from this cause, even if the bladder had not been ruptured. For this reason, therefore, the above case forcibly illustrates the value of Reid's method of reducing dislocations of the femur, to say nothing of its availability and comparative simplicity.

* Read before the Med. Soc. of the State of New York, Feb. 1862.

DIPHTHERIA IN THE COUNTRY.

By J. H. GUILD, M.D.,

OF RUPERT, VERMONT.

Having recently, in this section, passed through an epidemic of diphtheria of considerable magnitude and severity, I have been constrained, for two principal reasons, to give to the profession the results of some observations upon the disease and its treatment.

In the first place, although much has been said and written upon the subject, until it has become in all probability "a drug in the market," yet it must be remembered that it is now prevailing extensively throughout the country, exciting the same interest among the profession, and the same alarm throughout the community, that it did in New York two years ago. Again it has been stated by high authority† that the disease presents a different type in the country from what it does in the city—the inflammation being of a much higher grade, requiring the prompt use of antiphlogistics before commencing a tonic and stimulant treatment.

On referring to my notes I find a record of sixty-five

* Hamilton on Dislocations and Fractures, p. 637.
† See article of Prof. Woodward in vol. ii. of Am. Medical Times, p. 15.

cases occurring under my own supervision, and six cases to which I have been called in consultation. These were all well marked cases of diphtheria—cases in which there was a diphtheritic deposit of greater or less extent. Cases of augina, tonsillitis with superficial ulcerations scattered over the tonsils, and pseudomembranous stomatitis (muguet)—all of which are so often confounded with diphtheria by the superficial observer—although numerous, were rigidly excluded, and the peculiar diphtheritic deposit made the exclusive test. Of the sixty-five cases seen in practice sixty-four recovered, and one died. Of the six cases seen in consultation five died, and one recovered.

In nearly all of the cases the febrile stage was strongly marked. The pulse ranged from 130 to 160; the cervical glands often enormously swollen and excessively tender to pressure; breath fœtid; incessant expectoration of thick, tenacious, semi-transparent mucus; frequently marked cerebral disturbance, and invariably intense cephalagia. The diphtheritic deposit in every case enveloped the tonsils, frequently extending to the pharynx, involving the nares, and occasionally appearing upon the lips, tongue, and interior of the cheek.

Finding the grade of inflammation apparently so much higher than I had been accustomed to see it in New York, the first two cases, through the advice of the consulting physician, were treated for twelve hours with calomel and ipecac in small doses. This was followed by a mild cathartic, and afterwards sulph. quinine in tonic doses with stimulants, potassæ chloras, tinct. ferri chloridi, good nourishing diet, etc., etc. They both eventually recovered after a protracted illness of over three weeks' duration followed by diphtheritic paralysis of the velum pendulum palati, partial amaurosis, and general debility, continuing for several months, and yielding only to galvanism and tonics. At the same time I was called in consultation in a moribund case which had been subjected to the same treatment.

Losing confidence in antiphlogistics the third case was placed under the plan of treatment which I had seen prove so eminently successful with Prof. A. Jacobi, and which he has so ably laid before the profession in the first volume of the Medical Times.

This third case was a boy of eleven years of age. When called to see him there was a thick diphtheritic deposit completely enveloping the swollen tonsils, and crowding the uvula forward; pulse 140; face flushed almost purple; skin hot and dry, with marked cerebral disturbance, and great adenitis. Eight grains of quinia sulph. were immediately given, followed by three grains every three hours. Brandy a teaspoonful every hour. A saturated solution of potassæ chloras, acidulated with hydrochloric acid, in tablespoonful doses every hour. With each dose of brandy was mixed either sweet cream, eggs, or beef-tea. To these were added insufflations of alum and tannic acid equal parts mixed, every four hours, and externally hot fomentations with flannel cloths to the swollen glands, as hot as could be borne by the patient, and changed every five minutes. In a little less than two hours the fever declined, the pulse dropped to 120, the mind became clear, cephalalgia abated, and a profuse perspiration broke out over the whole body, continuing for several hours. There was no exacerbation of the fever, the alarming symptoms rapidly abated, and, on the fourth day, the diphtheritic exudation came off in large flakes one-fourth of an inch in thickness, leaving a healthy surface underneath, followed by no secondary deposit.

The remaining sixty-four cases, with one exception, were treated in a similar manner. If seen during the febrile stage quinine was given in large doses of from five to eight grains every six or twelve hours, for two or three days, according to the age and severity of the case. A rapid and permanent remission of the fever was the invariable result. It was then given in smaller doses of from two to three grains every three or four hours, until the diphtheritic deposit had entirely disappeared. The single exception to this plan of treatment, and the only one which proved fatal, commenced with rather more than the average mildness. It was seen during the febrile stage (pulse 120), but through some officious interference the directions were not followed. Quinine was given in small doses, and the alcoholic stimulant entirely omitted for twelve hours. In that period the pulse advanced to 150, accompanied with an immense augmentation of the diphtheritic deposit. The child was then placed upon the same plan of treatment which had proved so successful in the previous cases, but, unfortunately, although there was some slight amendment, the lost ground was never regained, and the patient succumbed on the fifth day to an extension of the exudation into the larynx and trachea.

Of the six cases seen in consultation three had been previously treated with purgative doses of calomel and ipecac, followed by tonics and stimulants, two had been mistaken for mild tonsillitis by the attending physician, who had never before seen a case of diphtheria, and treated accordingly. They all died. The remaining one was seen early, and the plan of treatment adopted which had proved so successful with me, and the child recovered.

From a careful examination of the foregoing cases, and a comparison of them with numerous cases in the adjoining towns which have terminated fatally under antiphlogistic treatment, I am led to the following conclusions:—That calomel in the treatment of diphtheria is unnecessary at least, if not positively detrimental. That quinine is invaluable, and, to have its full effect in the febrile stage, should be given in doses of from five to ten grains twice a day. A rapid diminution of the fever invariably follows, with no exacerbation the ensuing day. In those passive cases without febrile reaction, and which generally prove the most dangerous, I have found a better effect from it given oftener and in smaller doses, but never less than from ten to twenty grains daily. The albuminuria, which commences generally from the fourth to the eighth day, and so often proves fatal, can be, as first stated by Prof. Jacobi, effectually controlled by the effect of tannic acid, which, at the same time, produces a fine local effect upon the diphtheritic deposit. I attribute to its free use the recovery of at least twenty of the cases above reported. One, a child of two years of age, had diphtheria for five days when I saw it. There had been urodialysis for the last twenty-four hours, and the child was then suffering from uræmic convulsions. The hot bath gave temporary relief, and was followed by three grain doses of tannic acid every four hours. A restoration of the suspended secretion within twenty-four hours was the result, and the patient recovered. The local use of all caustics, and especially the argent nit., is of doubtful utility, from the difficulty of applying it to the seat of the disease, owing to the œdema of the tonsils and uvula, and the protection afforded to the hyperæmic tissues by the diphtheritic exudation. Insufflations of alum, as recommended by Trousseau, combined with tannic acid, were alone relied upon for that purpose. Again, an external application of flannel cloths, wrung out in hot water, as hot as can be borne by the patient, and changed every five minutes, will subdue the cervical adenitis quicker and more effectually than any other external application. They are very soothing and grateful to the patient, the writer having repeatedly seen little children, after two or three applications, importuning the nurse to change the cloths more frequently. That alcoholic stimulants are imperatively demanded from the very outset of the disease, both for their stimulating effect and their action upon the skin. They should be given in small quantities frequently repeated. In those passive cases without marked febrile disturbance the quantity should be increased. That potassæ chloras, as usually administered in the country, is given in too small a quantity, and should be administered to the amount of from one to two drachms daily to obtain its specific effect; and that its combination with hydrochloric acid will usually be well borne, and prove of great benefit, when the tinct. ferri chloridi is inadmissible from the irritation it produces. Above all things the most nourishing diet from the very commencement is absolutely required. Sweet cream, or eggs,

should be mixed with the alcoholic stimulant, strong beef-tea, oysters, chicken broth, etc., administered freely. The wishes of the patient are to be no criterion to the nurse in the article of diet. From the difficulty of deglutition the patient will generally object to food as well as medicine. In such cases liquid food in liberal quantity, and that of the most nourishing kind, must be insisted upon. Through its influence alone I have seen patients rally and finally recover, after the friends had given up the case, and even a *mother's* faith and love had failed to find a ray of hope.

EPIDEMIC PUERPERAL FEVER IN BELLEVUE HOSPITAL.

By FRANCIS R. LYMAN, M.D.,
HOUSE PHYSICIAN.

Perhaps there is nothing in medicine more clearly proven than the fact, that puerperal women collected in great numbers in the wards of hospitals are liable to epidemics of child-bed fever. Again, it has been noticed that these epidemics recur at certain seasons of the year. For instance, in examining the records of Bellevue Hospital, from 1847 to 1862 inclusive, such an epidemic has been found to have occurred every March. During the existence of these epidemics, the depressing influence of the zymotic cause has been found to affect the tone of all the patients; and their liability to mammary abscesses, and all the various inflammations of the puerperal state, has been greatly increased.

It is for the purpose merely of recording one month's observations in the lying-in wards, in regard to the latter point, that this short communication is written. At the first of March, 1862, there were thirty-five patients in the lying-in ward to forty-three beds. One of the patients was suffering from an attack of metro-peritonitis (puerperal). From the first to the tenth there were seven women delivered. Of them, two were transferred to the medical wards, one laboring under a phlebitis affecting the veins of the left leg, associated with metro-peritonitis; the others having an ovaritis. Of the remaining five, none were excepted from having a chill; in some cases repeated with all the symptoms of approaching puerperal fever.

Morphine was administered, in some instances very freely, to control the inflammatory tendency, and the patients were all placed upon quinine with nourishing diet. Quinine was given to every patient who manifested the least unfavorable symptom, and they were very few who did not require it.

The wards were thinned of their patients by transfers and discharges, and those which held the suspicious cases were thoroughly ventilated and cleaned, the beds taken out and replaced by fresh ones. From that date (the 12th), the influeuce of the poison seemed to have been destroyed. The patients affected continued to improve, and are now all convalescing.

But the most marked result wrought by these sanitary changes, was in the cases of mammitis. In the convalescent and lying-in wards on the 12th March were six cases of simple phlegmons of the breast, supra-glandular inflammations. These patients were all placed upon quinine, ale, and good diet, by order of Dr. Barker, with the ordinary local applications, ext. belladonnæ, etc., etc. Only two of the cases went on to suppuration, and the abscesses were both opened on the 28th March. A local phlebitis was present in two cases, both of which did well on the treatment indicated above. The patients continued to improve under the tonic plan of treatment, and by the first of April there was no longer any sign of puerperal fever, and there were but three cases of mammary abscess, one of these having come in from the street. The patient with phlebitis and metro-peritonitis died, and the autopsy showed the usual lesions.

Drs. Wm. Detmold, Thomas M. Markoe, and Chas. D Smith, of this city, of the Volunteer Corps Surgeons from this State, have been ordered to Fortress Monroe.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, March 5, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. NOEGGERATH'S PAPER ON INVERSION OF THE UTERUS.*

Dr. B. Fordyce Barker said:—I have occupied lately so much of the time of the Academy in discussing another subject, that I feel some hesitation in speaking on this, but as the paper we have just listened to is one of great value, and one in which any of us may be called to feel a personal interest, I will take the liberty of alluding to some practical points connected with it. Although inversion of the uterus is a very rare accident, not occurring once among one hundred and forty thousand labors in the Dublin Lying-in Hospital, and in the London Maternity Charity, yet it is liable to occur to any one. In the *Trans Med. Soc. of N. Y.*, Dr. Bissell, of Utica, reports three cases which he met with. I have seen five cases, the prominent cases of which I will presently allude to. Dr. Williams, of Manhattanville, informed me that he had seen four. The first question which arises is—What is the cause of this accident? This is a practical question, which may come home to any of us. Two or three years since, a case of great medico-legal interest was tried at Chicago, based on this question, involving a sum of $20,000. Probably, most of the leading obstetricians of the country were consulted by the counsel of one or the other party, as to the point whether inversion ever occurred, except from improper traction of the cord, or some other neglect or malpractice of the midwife or accoucheur. Undoubtedly, a great variety of opinion was given; and in stating my own convictions, I think I but express the general sentiment of the profession, which has resulted from a careful study and analysis of the accumulated experience upon the subject, viz. that it does in a very large number of cases occur spontaneously. I will go further and say, that it is doubtful whether it ever arises from traction of the cord. Physicians have been repeatedly unjustly accused of causing this accident by improper management of the case. In three of the cases I have seen, this certainly could not have been the fact. I will detail three cases somewhat minutely, for the purpose of illustrating certain points which I shall presently speak of. The first case I saw some sixteen years since, and the inversion had then existed for three years. It was in this case supposed to be due to traction of the cord, as the history given was that the physician who attended her was intoxicated, and pulled very strongly upon something, asserting, after her delivery, that another child remained behind. You know, Mr. President, that at that date there were but two alternatives in cases of chronic inversion of the uterus—either to submit the patient to the danger and shock of extirpation of the uterus, or to leave her in a broken-down miserable condition, probably to die sooner or later from the exhaustion resulting from the accident. In my case I proposed the former as offering a chance, but I was obliged to say that also there was a strong probability that death might result from the operation, and the patient and her husband decided not to submit to it. Some four years later I heard that she died from exhaustion and dropsy.

The second case occurred at West Farms, in this State, in 1852. I had engaged to attend the patient, a primipara, at the time of her confinement. But her labor came on unexpectedly, and was very rapid. Her brother-in-law, a physician from St. Louis, was visiting her at that time. The child was still-born, and the attention of the physician was occupied in measures directed for the resuscitation of the child (the cord had been cut, and the child removed

* See page 230.

from the bed), when the nurse exclaimed, "Mrs. —— has fainted," and her appearance was such that he at first supposed her to be dead. On examination he found that profuse bleeding had occurred, and that a mass, which he found to be the inverted uterus with the placenta attached, was protruding from the vulva. He pushed it back into the vagina, and the hæmorrhage ceased. Stimulants were given freely, and I was sent for. It was twelve hours after the accident that I saw her, and she had then rallied from the collapse. I peeled off the placenta with a good deal of difficulty, and finally, having brought the patient under the influence of chloroform, I succeeded in repositing the uterus, and she made a good recovery. In this case I have the testimony of the physician, nurse, and patient, that there was no traction on the cord, which was twenty-six inches in length, and not wound around the neck of the child. Before alluding to the other cases which I have seen, I will remark on one or two points referred to by the author of the paper that we have listened to this evening. At a meeting of the State Medical Society, some three or four years since, I had a conversation on this subject with Dr. Quackenbush, Professor of Obstetrics in the Albany Medical College, and I was so much interested in his, to me, novel views, that I moved the appointment of Dr. Q., to read a paper on the subject at the next meeting of the Society. In this paper, which has been published in the *Trans.* of the Society, Prof. Quackenbush has failed to express his views with the same clearness and force as he did to me in private conversation. In brief, his views were, that inversion of the uterus rarely commenced by a dimpling in of the fundus, but at the cervical portion of the body of the uterus, just at the junction of the body with the neck; that is, in other words, at the os internum, and that this organ is gradually inverted from this point upwards to the fundus. Now, if we reflect that the neck of the uterus and the body of the uterus are anatomically and physiologically two distinct organs; that during gestation the whole tissue of the cervix becomes softened, a softening entirely distinct from any such change in the muscular walls of the body of the uturus; and that this softening of the cervix remains for some time after parturition, when ordinarily the body is firmly contracted, I think that it will be seen that this opinion rests upon a sound physiological basis. I think this will explain those cases where the inversion has apparently gradually been developed some days after parturition, and I do not see how they are to be explained in any other way. At any rate, my own experience has convinced me that the organ can be reposited by gradually reinverting it at the cervix uteri, when it cannot be done by reinverting at the fundus. In illustration of this fact I will mention a case that I saw in Brooklyn in consultation with Dr. Byrne and Dr. Dudley, where it was impossible that traction of the cord or any improper treatment could have been the cause. I saw her the eighth or ninth day after her confinement. The inversion was developed four days after delivery. She was brought under chloroform, and I found it utterly impossible to reposit the organ by any pressure to reinvert the fundus. But, finally, by strongly compressing the body at this junction of the cervix, and pressing upwards, I succeeded in restoring the organ, and I have learned from Dr. Byrne that the patient perfectly recovered. Another case I saw at Manhattanville, a patient of Dr. Williams, after her fifth confinement. The first stage of the labor had been very tedious, lasting some forty-eight hours, not severe, but the pains were just sufficient to deprive her of sleep and rest. Dr. Williams left her for a half hour to visit another patient in an adjoining house, the cervix at this time being not fully dilated. On his return he found the child in the bed just delivered, the woman flooding profusely, and the uterus inverted with the placenta attached. He separated the placenta, and attempted to reposit the organ, but only succeeded in pushing it back into the vagina. The hæmorrhage ceased, but returned again the third day afterwards. Dr. Williams made many attempts to reposit the uterus, but they were unsuccessful. I saw her on the fourth day after the accident; she was then so exceedingly prostrated by the repeated and profuse hæmorrhages that we did not dare to give her chloroform, but we gave her instead a grain of morphine. In this case I also endeavored, unsuccessfully, to restore the organ by dimpling in the fundus. I eventually succeeded by a similar procedure as in the former case. I must say, however, that it was the most fatiguing and difficult obstetric operation that I ever performed. This patient, also, perfectly recovered. In conclusion, I will say that this case, which we have listened to in the very interesting and valuable paper of Dr. Noeggerath, adds another proof to the cases of Dr. Smith, of London, and Prof. White, of Buffalo, in one of which the inversion had existed twelve and the other thirteen years, that the resources of art may prove successful in restoring the organ under those circumstances, where formerly it was regarded as justifiable to subject the patient to the great danger of the operation by extirpation of the organ.

Progress of Medical Science.

PREPARED BY E. H. JANES, M. D.

STRICTURE OF THE URETHRA.

At a meeting of the Pathological Society of London, the proceedings of which are published in the *Med. Times and Gazette*, Mr. Barnard Holt exhibited a strictured urethra showing the results of forcible dilatation after death. "The patient, who was known to be suffering from severe stricture of the urethra, died in the Westminster Hospital of fever, and the opportunity was taken to introduce Mr. Holt's "stricture dilator," post-mortem, and to slit the stricture precisely as it would be done in the living body, with the view of examining the effect produced by the operation. The urethra having been carefully removed and opened, showed a longitudinal rent in the mucous membrane and sub-mucous tissue of the floor of the urethra, corresponding to the situation of the two strictures which had existed, but the vascular tissue of the corpus spongiosum was uninjured. Mr. Holt remarked that the appearance corresponded exactly to those he had always imagined, but he had not had an opportunity of ascertaining, owing to the uniformly favorable results of the operation. Mr. Henry Thompson said he had had an opportunity of closely examining the specimen, and of witnessing the performance of the operation in several cases, certainly with the best results, but he still doubted whether the stricture was really torn, and thought that it was rather the healthy tissue that gave way. Mr. Holt replied that, as the calibre of the urethra was restored in all cases, he presumed that the stricture was split, and as Mr. Thompson himself said that the stricture was commonly at the lower part of the urethra, he considered it highly satisfactory that the rents should be found in that situation in the specimen. In answer to Mr. Hutchinson Mr. Holt said that his patient had never suffered from abscess in the perineum."

SYPHILITIC MALFORMATION OF TEETH.

Mr. Barwell exhibited a cast of the teeth from a syphilitic child, upon which Mr. Hutchinson remarked that "he did not believe one tenth of the cases of malformation of the teeth which came under notice had anything whatever to do with syphilis. The malformation which was diagnostic of that disease was a special, very peculiar, and comparatively rare one. It consisted of dwarfing and notching of the central incisors of the upper set. If this condition of the pair of teeth were not present, all other deformities should count for nothing. He had met with no single case tending to shake his confidence in the value of this condition as a reliable symptom. On the contrary, all recent observations had tended to confirm it. It was, however, a con-

dition which varied in degree, and which required some practice in its appreciation. In many cases of hereditary syphilis the teeth were but little malformed, and in some they might even escape altogether. He believed that the malformation was due to inflammation of the dental structures at an early period of infantile life. If a syphilitic infant escaped an attack of stomatitis the teeth would probably escape malformation, just as if, should no inflammation of the nasal passages occur, the nose would escape the deformity, which is usually so marked in those children. He had many opportunities for seeing families of syphilitic children, and had always found the malformation of teeth most marked in the eldest, and becoming gradually less so in the younger members. He would venture to add, as a precaution, that those pecularities were never met with in the first set of teeth, since many mistakes had come to his knowledge in consequence of inattention to this fact."

AN EPIDEMIC CHECKED.

"A remarkable proof of what may be done in removing causes of disease by careful supervision and skilled medical direction, has been afforded at the Central London District School. The children at that school were, as we stated lately, suffering most extensively from defective domestic arrangements. Putting aside some minor causes of complaint, they were the subjects of an epidemic affection of the eye. Upwards of a hundred of them were so affected. Mr. Haynes Walton was called into consultation as an ophthalmologist of scientific reputation, and decided that the affection was catarrhal ophthalmia; that the dust of the court-yards, and other conditions brought under review, were not the causes of it, but that it was due to an injudicious method of ventilation. Over the head of each bed was a great hole, through which the air was constantly renewed; and thus each child was continually exposed, when lying in bed, to a direct draught of cold air. The result was almost universal catarrhal ophthalmia. These holes he advised to be stopped up, and other methods of ventilation introduced as a substitution. The result has been that ophthalmia has disappeared from the school, and so completely, that a recent committee have intimated a doubt whether it ever existed. This is just one of the instances of the useful preventive functions which medical men may be called to fill; great good would result if public institutions were more thoroughly and generally supervised in this way."—*Lancet.*

American Medical Times.

SATURDAY, APRIL 26, 1862.

HOUSEHOLD HYGIENE.

One needs but to use his eyes in a promenade along Broadway, that great artery through which courses incessantly the vast and brilliant life-current of the Metropolis of the western world, to be convinced of the great improvements which a few years have produced in the thousand things pertaining to the *Health*, as well as the luxury and comfort of mankind. The shop windows of that thoroughfare constitute a museum, of at least five miles in length, of things elegant, things curious, things wonderful, and things useful, where one may saunter for hours, and find both pleasure and profit in the most extraordinary collection of the animate and inanimate attractions that the world can produce. As a *picture gallery* it can hardly be said to have its equal. The most refined and attractive productions of the easel are there displayed with an abandon of cost, so to speak, indicative of the highest culture of the art; while the competing powers of the *sun painters* are put to their highest tension to excel in their peculiar line. There we realize the true refinements of civilization, and but for the noise of the thousands of omnibuses, carriages, carts, and vehicles of every description, which a horse-railroad would greatly alleviate, it would have no drawback as the most inviting promenade in the world.

This allusion to an apparently unprofessional subject (though in truth everything that influences the condition of mankind is worthy of professional notice) is in consequence of our attention having been attracted to the display in the shop windows of several articles bearing a direct relation to the question of human health, in connexion with what we have designated in our caption as Household Hygiene.

There are two things greatly to be desired in this relation, especially in city life, for the promotion of general and individual health. They are, 1st. Relief from the *drudgery* of household labor, and the evils flowing from unintellectual occupation and bodily fatigue; and 2d. Agreeable inducements to increased physical exercise, especially among children and adult females.

After a recent walk along this remarkable avenue we memorized together a group of objects having a direct relation to human health, and have thought them worthy a more permanent record, for the benefit of our professional readers, and through them the families under their care.

Doubtless the most remarkable of the inventions falling under this classification is the *Sewing Machine.* This has come to be so essential a part of the household that no one who can will fail to possess one of some of the numerous patterns, or "stitches," for by that they are technically distinguished. Who can calculate the extent of the blessing brought by this beautiful invention in the households of the land? Time, money, and health are all saved by it, and had Hood been born a few years later his "Song of the Shirt" had never been written, while even now his ideal of "fingers weary and worn" lives only in the memory of a few, so completely has the "machine" revolutionized that branch of human, and especially female, labor. The piano gives no more agreeable sound to our ears when we enter a patient's house, than the gentle whirr of a busy Wheeler & Wilson, a Finkle & Lyon, a Grover & Baker, a Singer, or any other of the numerous claimants to popular favor. Even the Japanese, it seems, have learned to appreciate it, and, according to Minister Harris, they will soon imitate its manufacture, from which no patent can bar them. Within three or four squares may be counted a dozen windows beautified with the indications of comfort and health, the products of this new creation of American genius.

One of the most disagreeable things we have to encounter in a dwelling, even the most elegant and well kept, is the volume of *fine dust* which continually pervades the air. Every brush of a dress against the furniture, every act of sitting, every movement of a chair, every book taken from a shelf, and every tread upon the carpet, raises a cloud more or less dense, and which, in our universally unventilated apartments, becomes in process of time increased and concentrated to a degree which is positively oppressive to the senses, and injurious to the health. Then, again, the manner of cleansing the carpets and furniture is generally

such as to aggravate the evil. Biddy, to whom this important work is usually committed, goes at it with windows closed, or at most opened on one side only, so that no breeze can get through the apartments, and having no idea of ventilation, or any fear of consumption or asthma, first whisks her broom over the carpet with her strong arms, raises an opaque fog which, having no means of escape, settles again upon everything, permeating every crevice, even through the coverings of the sofas and chairs, whence every tap of a finger will reproduce it. The sweeping being over, and the fog somewhat settled, then comes the operation of *dusting*, which is supposed to mean a removal of the offensive stuff from the apartment; but by the feather duster the evil spirit is only raised again, to be redistributed, and driven in greater quantities into the cracks and crevices of the furniture. It is a fair estimate that of this dust nine-tenths come from the woollen carpet, that item of luxury, which, while it is an evidence of a higher civilization, is equally a deteriorator of health, on account of its peculiar power of holding dust, and increasing it by its wear, to be raised by every footfall and every touch of the broom. Hence, since carpets we must have, in obedience to fashion's dictates, any invention calculated to counteract in any degree the evils alluded to, of the dust from sweeping them, we should hail as a sanitary boon. Such an one has been attempted in the form of the "Carpet Sweeper," by which it is claimed that no dust is raised, it all being thrown into a tight box as the instrument is pushed or drawn over the floor. The idea of the "Carpet Sweeper" is, therefore, entitled to a decided rank among the promoters of Household Hygiene.

Of the numerous insanitary evils incident to city life there is none greater than the restraints imposed upon bodily exercise, especially in the open air, chiefly owing to the want of opportunities. Unlike the rural districts, where all nature invites to free action of limb and lung, amid trees jocund with song of birds, or over fields of scented clover, unchecked by conventional formalities, the city presents scarcely an inducement to physical exercise, beyond a funereal promenade along the crowded marts, or a ride by carriage or horseback in a manner as carefully guarded as to propriety as if always going to church. Even the healthful parlor sport of battledore and shuttlecock, and that of the "Graces," are precluded, since the general introduction of gas chandeliers, which check the flight of the winged messengers. So also trundling the hoop, and skipping the rope, are environed with difficulties which prevent them in a great degree. The obstructions to exercise are responsible for no inconsiderable portion of the enfeebled, delicate, and hyper-nervous organizations and abbreviated lives of the upper and middle classes. Any inducement to bodily exercise, especially in open air, should therefore receive the encouragement of both physicians and the families of their patients. We hail with great satisfaction, on this account, the renewal of the popularity of the elegant exercise of *skating*, a fact chiefly due to the exertions of the Central Park Commissioners, in preparing and keeping in order two fine skating ponds. As this is, however, available for a small fraction of the year only, we have been gratified to notice an invention for furnishing our young men and maidens with the means of skating *all the year round*. The *Thaler Floor Skates* accomplish this to perfection. Seeing in a shop window a few doors above our publication office a number of these skates for sale, we stepped in one day, and were invited into a large hall in the rear, to witness the capacity of the instrument, and we confess our surprise and pleasure at the display made by a few young experts. With this skate the "spread eagle," "locomotive," "toe and heel," "grape vine twist," and every other evolution possible with the common ice skate, may be performed with perfect safety and facility. It is one of the happiest substitutes for the old abandoned games we can conceive of, making a delightful and attractive home amusement, affording beneficial exercise and recreation for young and old. Every muscle of the frame is brought into action by this exercise, with a feeling of security against accident which is not found on the ice, so that even in winter, except for the out-door exposure, this mode of skating must, in many cases, have the preference.

We may recur to this subject at a future time, as there are other matters of interest bearing upon the important question of Household Hygiene.

THE WEEK.

We may well congratulate the medical staff of the Army, and the profession of the United States, on the passage of the Medical Reform Bill through Congress. In multitudinous ways this deplorable war is destined to renovate our military as well as civil institutions, to place them on a firmer basis, and give them that scope and effectiveness essential to the discharge of the full measure of their duties. This war found the Medical Department of our Army with almost precisely the same organization that it has had for nearly fifty years, the army during that time rarely exceeding 17,000 men. Although the Department was capable of considerable expansion, it was quite impossible, with the small force at its command, to meet the immense demand suddenly made upon its resources. We do not here allude to material aid to our Army, for its power of obtaining supplies is, we believe, unlimited; but to that personal supervision of the details of the medical affairs of the army which alone could render its power effective. The defects in the Department were brought out in bold relief by the organization of a large army, and to none were they so palpable as to the Sanitary Commission, which has, by its well directed efforts, supplied those constant and pressing wants which the Department seemed powerless to meet. To the Sanitary Commission, the country owes a debt of gratitude, not less for its persistent and finally successful effort to reform the Medical Department, than for its ceaseless activity in supplying the necessities of the soldiers. The Department is now placed on a scientific basis, not inferior to that of England and France, and from its reorganization we anticipate that efficiency which will so commend itself to the Government that no other changes will take place, other than such as will enlarge its powers of usefulness.

Briefly, the Medical Bureau has gained these points:— 1. A larger and more effective force; besides an addition to the force of the staff, it is now to have a special department of Sanitary Inspection, with a sufficient corps of officers to place our entire army under the constant sanitary surveillance of the Medical Bureau. 2. An increased rank, the Surgeon-General having now the rank of a Brigadier-General. 3. Finally, selection of the highest officers according to merit, and not the old effete system of succession by seniority, which was ever liable to place at its head a man incapacitated by age.

We are aware that there are members of the regular staff who are not altogether satisfied with these changes; but we believe no one who is conscientiously desirous of the highest degree of efficiency in the medical department will hesitate to acknowledge that, however his own status may be affected, the department itself has undergone a reorganization, which not only the exigencies of the times but modern military science requires.

Relying upon that judicious selection of officers which the President and Secretary Stanton are so well qualified and so determined to make, we confidently anticipate for the medical department of our Army a career of usefulness and efficiency unparalleled by the best foreign military medical organizations.

—

We learn through the public prints that William A. Hammond, M.D., has been *selected* by the President as Surgeon-General of the U. S. Army under the recent reorganization of the Medical Department. The profession will hear of the confirmation of this appointment with the most sincere gratification. No man could be selected, who so happily combines in his professional relations the confidence and esteem of both the Medical Staff of the army, and the profession of the country, as Dr. Hammond.

A native of Maryland, but long a resident of Pennsylvania, Dr. Hammond entered the army as Assistant-Surgeon, June 29, 1849. He remained in the army until 1860, when he resigned his commission, and soon after accepted the chair of Anatomy and Physiology in the University of Maryland, Baltimore. He also became an associate editor of the Maryland *Medical Journal*. On the breaking out of the rebellion several of Prof. Hammond's associates espoused the cause of the rebels, while Prof. H., true to his country, showed his active sympathy for her success in that dark hour of trial, by again entering the Regular Medical Staff.

During the first period of service on the Staff, Dr. Hammond occupied important and most laborious positions on our frontier; and that he was an acute observer, an efficient officer, we have abundant evidences in the valuable reports which he communicated from time to time to the Medical Bureau, and which have since appeared in the Reports of that Department. His contributions to periodical medical literature were also numerous and valuable. To the profession at home and abroad Dr. Hammond is best known by his physiological writings, which have placed him in the front rank of experimental physiologists. To our immediate readers he will be remembered as the author of a course of lectures on chancre, which appeared in the early numbers of the last volume of the Medical Times, and which attracted much and deserved attention.

If Dr. Hammond is now elevated to the responsible and honorable position of Head of the Medical Staff of our Army, we believe he will have the cordial sympathy and support of his professional brethren, in both civil and military life.

—

We learn that Government has selected David's Island, near New Rochelle, East River, about twenty miles from New York, as a site for Military Hospitals. The grounds are in course of preparation, and the buildings being erected will accommodate from fifteen hundred to two thousand patients. The hospitals will be in charge of E. Lee Jones, M.D., of this city, a gentleman who will bring to the discharge of his duties a large experience in hospital management.

—

In another column we have inserted the order of Gen. Hunter, relating to the sanitary regulations of his department of the South. A more complete code of Health Laws could not well be devised. They emanated, in whole or part, we believe, from the Sanitary Commission. We deem it most fortunate for our troops who are to pass a part of the coming season in that malarious district, that they have a commanding officer who believes that disease is more to be feared than an enemy, and who acts upon the principle that prevention is better than cure.

Reviews.

Course of Lectures on the Physiology and Pathology of the Central Nervous System, delivered at the Royal College of Surgeons of England, in May, 1858, by E. Brown-Séquard, M.D., F.R.S. 1860. Philadelphia. J. B. Lippincott & Co.

Lectures on the Diagnosis and Treatment of the Principal Forms of Paralysis of the Lower Extremities, by E. Brown-Séquard, M.D., F.R.S. 1861. Philadelphia. J. B. Lippincott & Co.

(*Continued from page* 227.)

In the treatment of chronic myelitis the following are the means to be employed:—

1. If possible the patient should never lie on his back, but flat on the abdomen, so as to diminish by the effect of gravitation the amount of blood in the spinal cord.

2. Those means that may attract blood outside of the spinal canal should be used as often as possible. The best of them is a hot douche between 98° and 101° Fahr. to the spine. The cold shower bath, if immediately after it the spine be rubbed with a flannel; dry cupping applied daily, blisters, moxas, cauteries, etc., are also useful. These local revulsives are to be preferred when myelitis is caused by a caries or other organic affection of the cord.

Internally belladonna and ergot are the most powerful remedies to diminish the congestion of the cord. In the beginning ergot alone is given internally; belladonna being externally applied in a large plaster (four by six inches) over the painful spot of the spine. The dose of powder of ergot is gr. iij. twice a day, gradually increased until it reaches gr. vj. twice a day. If there is no marked improvement in a few weeks ½ or ¼ gr. ext. belladonna is then administered twice a day. If with these means the patient does not get better, five or six grains of iodide of potassium twice a day, are added to the preceding remedies. Iodide of potassium should be used together with ergot and belladonna from the beginning, when meningitis and myelitis accompany each other.

Sloughs of the sacrum and nates are prevented or stopped by alternate application of ice, and a warm poultice as before mentioned.

Shampooing, galvanism, the use of the flesh-brush, and a warm foot-bath every night (when there is no œdema), are the means to prevent alterations of nutrition.

Nephritis or cystitis, when occurring, should be treated energetically. The bowels must be kept open—opium and other narcotics producing constipation should be avoided; in case of sleeplessness hyoscyamus is the remedy to be preferred among those generally resorted to.

As regards dietetic rules they are the same as in reflex paraplegia.

The treatment and prognosis of paraplegia due to chronic meningitis are nearly the same as in chronic myelitis.

However, blisters ought to be the principal means in cases of meningitis, one applied every fortnight. Iodide of potassium, gr. vj. twice a day, is to be preferred to ergot and belladonna, as it is one of the most powerful agents to determine the absorption of fluids effused in the cranio-vertebral cavity, either out or in the substance of the nervous centres. It is the only known remedy that may be employed without danger in the various forms of paralysis. It has, more than mercury, the power of producing the absorption of effused fluids in the vertebral canal, and decidedly it is less depressing than mercury. It is especially useful, too, in white softening due to fatty degeneration of the blood-vessels in the spinal cord. If the effusion attending meningitis be considerable, diuretics should be used in conjunction with iodide of potassium. The prognosis of paraplegia from congestion of the spinal cord is not so unfavorable as that of myelitis or meningitis. The same directions as in these latter are to be observed in the treatment of spinal congestion.

Treatment of paraplegia due to white softening.—Iodide of potassium is the principal of the remedies that may be relied upon; five grains of it mixed with equal dose of sesqui-carbonate of ammonia in a decoction of cinchona bark, or an infusion of calumba or rhubarb. The mixture ought to be taken an hour before meals to avoid the decomposition of the iodide by the gastric juice, and the setting free of the iodine, which causes a gastric disturbance, erroneously attributed to the iodide itself. Jointly with iodide tonics may be employed. Strychnia should be of service in cases of slight paralysis, though it may prove unfavorable if the paralysis be complete, on account of the congestion easily determining a rupture of the altered blood-vessels with hæmorrhage in the spinal cord. The cold shower bath applied to the spine is an excellent means of improving nutrition of the cord; besides, the patient should lie flat on his back at night, and live upon most nutritious food, drink wine or beer in a moderate quantity, and take as much exercise in the open air as possible, without, however, exhausting his diminished power of motion. Shampooing and galvanism may be applied with profit to the paralysed limb.

No difference is to be made in the treatment of paraplegia due to hæmorrhage in the spinal cord, unless that:—1st, Three doses of iodide of potassium, instead of two (of gr. v. each), ought to be given every day; 2d, Strychnine ought not to be employed; 3d, Constipation, lying down on the back, and all other causes of congestion of the spinal cord, should be carefully avoided.

As regards the treatment of hæmorrhage in the vertebral canal:—1st, All the most active means usually employed in the various cases of viseeral hæmorrhage should be at once made use of; 2d, The patient should be placed in bed on one side, and not on his back; 3d, Pounded ice should be applied, in bladders, all along the spine; 4th, If the patient survives several days, the same treatment as is above prescribed for eases of hæmorrhage in the grey matter should be employed.

We cannot finish our quotations without calling the reader's attention to the diagnosis and treatment of paraplegia due to a tumor of the spinal cord. According to the seat of the tumor there are symptoms of disease of the heart, the lungs, the walls of the chest, of the abdomen, lumbago, neuralgia, etc., depending upon the irritation of the roots of the nerves supplying these different organs. In the beginning there is local pain at the place of the tumor; the disease progressing there is frequently myelitis, and sometimes meningitis, with all their attending symptoms. When no inflammation is produced by the tumor the symptoms are very much alike to those of white softening, except that there is a local pain in the spine, and the effects of irritation of the nerves originating in the place where the tumor lies. The phenomena change according to the part injured by the tumor, being altogether the same ascribed to alterations upon the different columns or the grey matter of the spinal cord. But a very interesting symptom is the loss of the power of guiding the movements in the limbs, observed when the tumor presses upon the lower extremity of the spinal cord on its posterior surface. In this case, *so long as the patient can see them*, the movements of the limbs are possible; but as soon as he does not look at them, or in the dark, he cannot move them, and if standing is at once in danger of falling down. Such condition depends upon the alteration of some of the posterior roots of nerves, and of the posterior white and grey parts of the spinal cord, producing partial anæsthesia of the skin and muscles of the feet and legs. Epileptiform convulsion and even real epileptic fits have been observed with a tumor in the spinal cord. The cachectic condition of the patient may serve to distinguish whether the tumor is of cancerous, tubereular, syphilitic, or any other nature.

Local myelitis and meningitis in the cervical or in the upper part of the dorsal regions give rise to pretty much the same symptoms as a tumor in the spinal cord; but in meningitis so localized, it will be, however, a loss of reflex power in the lower limbs, the contrary being observed in case of a tumor. The diagnosis remains quite difficult between a tumor in the lumbar region and meningitis in this same part. However, there are more spasms in the muscles of the limbs in case of a tumor, and more in muscles of the back in case of meningitis, otherwise presenting an acute beginning and inducing a paralysis that would soon extend upwards.

The treatment of paraplegia from a tumor in the spinal cord consists:—1st, In avoiding the congestion and tendeney to inflammation by the means employed with myelitis: 2d, If the tumor be syphilitie large doses of iodide of potassium shall be the prineipal remedy; gr. v. taken thriee a day, for at least six months. In such cases, against the pain aeonite should be employed externally and internally (from v. to x. ♏ of the tincture a day) rather than belladonna. Ergot should be likely used as in other cases of tumor. In tubercular cachexia cod-liver oil will be resorted to. The diet must be nourishing, the patient ought to take exercise in the open air, and lie down in bed on one side of the body, and not on the back. His appetite and digestion ought to be carefully watched, and kept right by tonics, aperients, etc.

Although sufficient to show the value of the work, yet the cardinal points brought before the reader are far from being all those treated in the two volumes recently published by Dr. Brown-Séquard. Indeed, facts, instead of theory, shall finish with doubt in Medicine, and the illustration of this great truth strikes us on perusing the interesting lectures of the eminent physiologist; pregnant with the most positive researches, they throw an entirely new light on the obscure pathology of the nervous system. But, besides so manifold questions already investigated in such an immense and rugged field, many others equally important remain yet unsolved. Undoubtedly, new observers may enter the path now opened, achieving ere long more progress; whilst the untiring love for science and vigor of Dr. Brown-Séquard, and the exceptional opportunities to prosecute his inquiries, afforded by the appointment he holds at the head of a special hospital for nervous diseases in the largest metropolis of the world, give us also the hope of having his further observations and clinical results on a subject with which his name goes so intimately connected.

M. G. E.

Obituary.

DR. JEREMIAH BURRITT PIERCE.

Died, April 10th, Dr. Jeremiah Pierce, aged 72 years. Duty to the honored dead, justice to the profession, and the common sentiments of humanity, demand that the termination of the earthly career of this useful citizen, this ornament to

society, this able physician, and this "noblest work of God, an honest man," should not be without a becoming record.

Dr. Jeremiah Burritt Pierce was born in the city of Troy, of this State, about the year 1790. Like the great majority of boys of that day, his advantages for education were limited to English and lower mathematics. At about the age of eighteen he entered the office of the late Dr. Burritt of his native city, as apprentice and student in medicinc. His natural ability, and industrious habits of study, soon made him the favorite student. After spending about two years with his preceptor, passing the frequent experiences of those days attending the practical study of anatomy in the country, often at the great risk of life and limb, he came to this city and matriculated at the College of Physicians and Surgeons, New York. With his characteristic avidity for knowledge he could not but add much to his stock, from the teeming brain of Samuel L. Mitchel, from the practical lessons of Edward Miller, and from the varied and learned teachings of Drs. Romayne, Macneven, and John Augustine Smith. After spending about a year under the teachings of these distinguished men he returned to Troy, and soon passed the required examination before the censors of the district, receiving a diploma from the State Society. He soon after located in the then western village of Skaneateles, Onondaga co., of this State. There he remained in the active and arduous practice of his profession, such as none but country physicians can appreciate, till about the year 1819, when, at the urgent request of friends, and at the prospect of growing up with a city, which it then promised to become, he was induced to remove to Lyons, Wayne co., of this State, where he has just finished his earthly labors. His life, though one of great usefulncss, is thus seen to have been spent in an unknown village, in an unpretending, retired manner, away from the bustle of the world. Arduous and continual duty gave him no time to write, hence his intelligence was known only to those who came in contact with him. But his fund of practical knowledge was ample, and always ready. He was a true lover of medical science, fond of its reading, and spent every possible moment with the new and old books, and the periodicals; and thus kept himself fully up with the medical literature of the day. Nothing affo ded him more pleasure than a well-written description of a disease he was treating or had ever seen. He used to say, "I am glad some people have time to write."

Dr. Pierce was a thoroughly practical and more than usually skilful physician. He consequently enjoyed the highest respect of all who knew him as a medical man, and his counsel was much sought for at *home*, as well as at great distances. He was an active member of his county society, was sent as delegate from it to the State Society ou several occasions, and twice to the National Medical Convention. The honesty which characterized every act of his life was continually manifested in his intercourse with his patients, and with his professional associates. He never practised deception upon the one, nor did he ever intentionally do aught to injure the other.

Of few can it be said, as all who knew Dr. Pierce can say of him, even those whom he may have displeased, acknowledge the kindness of his intentions, and that he was a good man. To young men in the profession he was always especially friendly, never without an encouraging word for them, constantly ready with his influence to uphold them when worthy of it, and not unfrequently with his money to aid them, as the writer has occasion to know. Many a young practitioner has been thankful to Dr. Pierce for his influence in generously and honestly shielding him against malicious and unfounded charges of mal-practice or neglect. With his combined qualities of industry, intelligence, natural kindness of heart, faithfulness, and honesty, and with his great experience, we could not look for less than a humane and reliable physician. Such in truth was Dr. Pierce. Many have made more noise in the world, but few have done so much good, as all who knew him will attest. He was an example that both old and young physicians would do well to follow. He was a model citizen, a true Christian, and a physician whose loss will be widely felt. S. R.

New York, April 16, 1862.

Army Medical Intelligence.

GENERAL ORDER IN REFERENCE TO SANITARY PRECAUTIONS.

GENERAL ORDER—No 5.

Headquarters Department of the South, Hilton Head, Port Royal, S. C., April 7, 1862.

1. The Major General commanding desires to call the attention of the officers and men in this department to the paramount necessity of observing rules for the preservation of health during the warm months upon which we have now entered. There is less to be apprehended from battle than from disease, the records of all campaigns in climates such as this showing many more victims to the neglect of sanitary precautions than to the skill, endurance, or courage of the enemy. With proper care exercised, and certain simple rules of hygeine observed, the hardy soldiers of the Union, inured to toil and fortified by habits of industry, temperance, and cleanliness, have nothing to fear from the climate of the department in which it is their privilege to serve. During our war with Mexico the soldiers of New England, the Northwestern and Middle States, and the adopted citizens serving in our army, suffered far less from the diseases incident to a semi-tropical climate than the soldiers from the States embraced in this department. Though not so well accustomed to excessive heat, their physical energies had been more fully developed by habits of steady industry, and their constitutions presented greater natural obstacles to the inroads of malaria. Anxious that the men of his command may be preserved in the full enjoyment of health to the service of the Union, and that only those who can leave behind them the proud epitaph of having fallen on the battle-field in defence of their country shall fail to return to their homes and avocations on the termination of this unholy rebellion, the Major-General commanding, in conformity with the excellent advice of Surgeon George E. Cooper, United States Army, Medical Director of the Department, hereby establishes the following rules for the sanitary government of all the troops at present serving, or hereafter to serve, in Georgia, South Carolina, and Florida, and will hold all officers having the charge of camps or posts to a strict responsibility for their enforcement.

II. Care will be taken in the selection of camping grounds to avoid as much as possible the vicinity of malarious morasses or swamps: and the tents, in so far as practicable, are to be faced to the south. Each camp will be thoroughly policed twice each day, morning and evening, and all garbage or refuse matter will be collected and buried in the sinks.

III. Each tent will be screened or covered at the top and half-way down the sides with an arbor of brushwood or palm leaves, and shall be floored, whenever lumber can be procured, at an elevation of about three inches from the ground. When this cannot be done, each soldier will have a bunk raised eighteen inches from the ground on side poles, supported by forked sticks. All Quartermasters, to the extent of their ability, will furnish barrel staves to be placed across these side poles, and will issue the necessary lumber on receipt of proper requisitions.

IV. Tents will be struck at least three times each week, and every article of bedding and clothing taken out and aired, the flooring and bunks to be thoroughly cleansed before the tents are re-erected. On the days on which the tents are not struck the sides will be raised and kept raised for the purpose of ventilation; and during the nights free ventilation will be secured by having the centre seam in

rear of the tent opened for the space of two feet, and kept open by the insertion of a forked stick. An officer of each company will inspect the tents of his men nightly, except during stormy weather, to see that this important provision is carried out.

V. Sinks of the proper size, screened with brushwood or palmetto branches, shall be sunk at suitable distances on different sides of each camp, and the bottoms of these will be covered each morning with a layer of sand or clay about a foot thick. It will be the duty of the camp police to see that only the sinks on the lee side of the camp are used.

VI. Fresh meat is to be issued as often as practicable, and commanding officers, while near the seacoast or any pieces of water in which fish exist, should encourage such of their men as are off duty or not otherwise employed, to fish during the cool hours of the morning and evening, not later than nine A.M. in the morning, and not earlier than six P.M. in the evening. In a scarcity of fresh meat those troops in the most exposed and unhealthy situations are to be first served—the troops stationed in the batteries on the Savannah river, for instance; and to all troops so placed a large share of vegetables, in addition to the ordinary rations, should be sent.

VII. Vegetables, fresh or prepared, must be issued frequently to all the troops, and an extra issue of coffee furnished to the men on guard during the night, just previous to their being marched to their respective stations. The Chief Commissary of Department will see that the estimates and requisitions necessary to fulfil these requirements are forwarded to the Commissary General without delay, and will report to these head-quarters any failure of brigade or regimental commissaries to make due requisition for the supplies of the troops under their charge, in conformity with the terms of this order.

VIII. Breakfast will be ready for the men as soon as they leave their tents, which must not be until after sunrise. Except when immediately in face of the enemy, or when especially ordered by the commanding officer, reveille will not be sounded until half an hour after sunrise, by which time the sun's heat will have absorbed the miasma of the night dews. All the men will be furnished with straw hats, and will be required to bathe or wash themselves thoroughly at least twice each week, and change their underclothing once a week, or oftener if practicable. The hair and beard will be kept closely trimmed; and sentry boxes of lumber or small shade arbors of brushwood will be erected at all points where sentries are permanently stationed. All soldiers on night picket or sentry duty will be provided with india rubber ponchos.

IX. The proper cooking of provisions is a matter of great importance, more especially in this climate, but has not yet received from a majority of the officers in our volunteer service that attention which is paid to it in the regular army of the United States, and by the armies of Europe. Hereafter, an officer of each company will be detailed to superintend the cooking of provisions, taking care that all food prepared for the soldiers is sufficiently cooked, and that the meats are boiled or roasted, not fried. With a little care on this point, and the advantages both to health and comfort of good cooking explained to the men, much good may be effected.

X. All soldiers on duty in districts especially malarious, or on unavoidable fatigue duty during the hot hours of the day, should be given quinine in prophylactic doses, each dose combined with half a gill of whiskey, every night and morning. The certificates of regimental surgeons will be requisite to cover such issues.

Officers of the medical staff will see that the provisions of this order are complied with, and will promptly report any failure or neglect to the senior officers of the commands they are serving with, and to the medical director of this department.

By command of
Major-General D. HUNTER.

CHAS. G. HALPINE, Assistant Adjutant General.

Medical News.

FEVER AMONG THE RICH.—Fever, fighting for each foot of ground against the preventive physicians who seek to assail its strongholds, has retreated from the haunts of the poor to the houses of the rich. An efficient body of health officers have occupied themselves in this metropolis with driving fever from the filthy purlieus of the poor; they have swept away the abominations which invited it to those favorite camping-grounds. In the city alone five thousand cesspools have been removed, and with them the cohort of zymotic fevers which dwelt in the brooding miasms of their surrounding atmosphere. The poorest neighborhoods are now well drained, and kept free from sewer gas and the like sources of disease. During the last few years the mortality from fever was so much lowered as to give signs of the manifest success with which the officers of health had fought the good fight. But fever has found a new refuge, and again deals widely its fatal strokes. The houses of the rich have not the intelligent care and supervision which by law are given to the dwellings of the poor. This defect has been much debated by the health officers, and recently at their meeting it was resolved, in discussing a paper by Mr. Lyall, pointing to this want, to obtain powers for the health officer in respect to the construction of new dwellings, in some measure correlative with those given to the district surveyor. The wealthy have left open in their houses loopholes through which fever can enter by gullies, untrapped drains, and similar defects of sewerage. The enemy has entered, and the middle and upper classes of the metropolis are now suffering from typhoid fever—the fever of filth, of sewage gas, and of tainted water. The returns of deaths from this cause, which had fallen, are now rising again. The increased mortality is not amongst the poor, for they are still in their former favorable condition in this respect. In the autumns of 1859 and 1860, when the mortality from the disease was not nearly so high as it is now, the number of fever cases attended amongst the poor by the medical officers of the city unions was from 301 to 313 in the quarter—making an aggregate of 10 per cent. of the sickness returns; but during the quarter which has just expired the number of fever cases amongst the city poor has been only 76, which is barely 3 per cent. of all the sickness. No fact can indicate more strongly the migration of fever to the houses of the upper classes. They too must call in the systematic supervision of the health officer.—*Lancet.*

A NOVEL MARRIAGE LICENCE.—M. Giordano, professor of midwifery at the University of Turin, gave this year the lecture introductory to the business of the session, and alluded principally to deformities of the pelvis in relation to marriage. So impressed is the professor with the importance of a capacious pelvis in a married woman that he proposes the following regulation: "Every woman shall be required, before signing the marriage register, to produce a certificate respecting the proper conformation of her pelvis." Another summary measure touching pelvic organs has been proposed by M. Larghi, of Vercelli: as a preventive of puerperal fever, the lining membrane of the uterus should be well brushed with a solution of nitrate of silver.—*L' Union Médicale.*

ABOUT 100,000 cinchona trees, which produce the Peruvian or Jesuit bark from which quinine is distilled, are now flourishing in the Dutch settlements in Java. A few years ago there were only a small number of these trees there, and which were reared from seeds obtained from Peru. The cinchona has also been planted in the Neilgherry hills in India with great success. Measures are about to be taken to plant the tree in Ceylon.—*Dublin Med. Press.*

DRS. S. H. TEWKSBURY of Portland, and Wm. Warren Greene, of Gray, have been selected by Gov. Washburne, of Maine, as surgeons for special service among the sick and wounded at the seat of war, and have been ordered to Fortress Monroe, to enter upon their duties.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 14th day of April to the 21st day of April, 1862.

Deaths.—Men, 91; women, 98; boys, 103; girls, 98—total, 395. Adults, 189; children, 206; males, 199; females, 196; colored, 7. Infants under two years of age, 129. Children reported of native parents, 19; foreign, 142.

Among the causes of death we notice:—Apoplexy, 10; Infantile convulsions, 33; croup, 7; diphtheria, 6; scarlet fever, 21; typhus and typhoid fevers, 9; consumption, 68; small-pox, 11; dropsy of head, 13; Infantile marasmus, 12; diarrhœa and dysentery, 0; inflammation of brain, 9; of bowels, 15; of lungs, 31; bronchitis, 12; congestion of brain, 7; of lungs, 4; erysipelas, 5; whooping cough, 4; measles, 1. 216 deaths occurred from acute diseases, and 33 from violent causes. 315 were native, and 80 foreign; of whom 70 came from Ireland; 6 died in the Immigrant Institution, and 46 in the City Charities; of whom 12 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

April, 1862	Barometer.		Temperature.			Difference of dry and wet bulb. Therm.		Wind.	Mean amount of cloud.	Humidity Saturn. 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In.	°	°	°	°	°			
13th.	30 22	.10	48	40	56	9	13	N. to S.E.	.04	500
14th.	30 25	.05	50	40	60	5	9	N. to S.E.	4	688
15th.	30.35	.10	52	42	61	5	9	N. to S.E.	5	698
16th.	30.40	.07	55	45	68	5	9	S.E.	3	726
17th.	30.30	.10	62	47	76	6	10	S.E.	1	660
18th.	30 00	.34	70	56	83	5	8	S.E.	4	734
19th.	29.91	.20	60	50	68	9	14	W.	2	510

Remarks.—13th, Fine day; wind fresh. 14th, Variable all day. 15th, Wind fresh during the day; cloudy P.M. 16th, Cloudy A.M.; day variable; wi d mostly fresh. 17th, Cloudy A.M. 18th, Very sultry; light rain P.M. 19th, Wind fresh during the day; variable sky P.M.; Barmeter very high during the day.

MEDICAL DIARY OF THE WEEK.

Monday, April 28.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Thomas, half-past 1 P.M.
- Eye Infirmary, 12 M.

Tuesday, April 29.
- New York Hospital, Dr. Markoe, half-past 1 P.M.
- Bellevue Hospital, Dr. Loomis, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Wednesday, April 30.
- New York Hospital, Dr. Griscom, half-past 1 P.M.
- Bellevue Hospital, Dr. Sayre, Is. Hos., half-past 1 P.M.
- " " Dr. Flint, Is. Hos., 3 P.M.
- Eye Infirmary, 12 M.

Thursday, May 1.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Barker, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Friday, May 2.
- New York Hospital, Dr. Markoe, half-past 1 P.M.
- Eye Infirmary, 12 M.
- Bellevue Hospital, Dr. McCready, half-past 1 P.M.

Saturday, May 3.
- New York Hospital, Dr. Griscom, half-past 1 P.M.
- Bellevue Hospital, Dr. Wood's Clinic, 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICES.

Sanitary Association.—*A Stated Meeting of the N. Y. Sanitary Association will be held at 7½ o'clock P.M., Thursday, May 1st, at Room No. 19, Cooper Institute, The subject for discussion will be "The Limitation of Venereal Diseases."*

Wm. H. Davol, M.D., late Physician to L. I. College Hospital, Brooklyn, removed to St. Paul, Minn.

References.—C. L. Mitchell, M.D., T. L. Mason, M.D., Prof. E. N. Chapman, M.D., of Brooklyn; Prof. Austin Flint, M.D., Prof. B. F. Barker M.D., of New York.

John W. Shedden, Apothecary, 368 Bowery, cor. 4th St.

Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

P. W. Bedford,

PHARMACEUTIST,

removed to

745 *Sixth Avenue, near Forty-fourth Street,*

Opposite Sixth Avenue Railroad Depot.

Descriptive Circulars with Samples of Work will be sent mail free.

Having just completed the most successful season's business they have ever enjoyed—wherein they have demonstrated that, *for all kinds of work*, they have "THE SEWING MACHINE OF THE WORLD"—enter upon the New Year with still more IMPORTANT IMPROVEMENTS, the latest being their

"NEW TAILORING MACHINE."

Having heretofore aimed almost wholly to supply a Family Machine, which should do all kinds of family sewing, and HAVING SUCCEEDED, we now enter the market with a Manufacturing Machine, which, for elasticity and strength of stitch—for rapid movements—for simplicity and durability, defies competition. While adapted to make the HEAVY ARMY AND NAVY COATS, with linen thread, it can, by a slight change, be made to do the fine family sewing; thus combining in one machine adaptation to FINE FANCY SEWING and HEAVY MANUFACTURING. This can be best appreciated by those who have owned and operated machines. We do not ask or expect the public to be governed by our statements alone. *We court investigation*, and refer to the thousands who have our machines in successful operation.

FINKLE & LYON SEWING MACHINE CO.,
538 Broadway, New York.

NEW BOOKS.

Sent Free by Mail on Receipt of Price.

Appia (P. L.) The Ambulance Surgeon, or Practical Observations on Gunshot Wounds. 12mo. Edinburgh, 1862. $1.87.
Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Clinical Essays, by B. W. Richardson, M.D. 8vo. London, 1862. $2.00.
Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Elements of Chemistry: Theoretical and Practical, by W. A. Miller, M.D. 2d edition, with additions. 3 vols. 8vo. $16.00
Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Gmelin (L.) Hand-Book of Chemistry. Vol. I. 2d Edition, revised. 8vo. London, 1861. $3.25.
Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Epilepsy: its Symptoms, Treatment, and Relation to other Chronic Convulsive Diseases, by J. R. Reynolds, M.D. London. $3.25.
Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Illustrations of Puerperal Diseases, by R. U. West, M.D. London, 1862. $1.10.
Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Contributions to Dental Pathology, by R. T. Hulme, M.R.C.C. London, 1862. 85 cts.
Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

An Inquiry into the Medicinal Value of the Excreta of Reptiles in Phthisis and some other Diseases, by J. Hastings, M.D. London, 1862. $1.60.
Baillière Brothers, 440 Broadway, N. Y.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians* (*principally country Physicians*) *Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crusbed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rne Bonrbon, Villenenve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseons eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rne Bourbon Villenenve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyoscianns, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is daily attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Record says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villenenve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.
By SAMUEL R. PERCY, M.D.,
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE VI.—PART II.

Physiological Effects.—I am not aware that any physiological experiments that have been published have been performed on animals, either with the podophyllum root or with the resin. I have performed some few experiments on animals, but mostly to ascertain the purgative effects of the resin. With the fresh root I have tried no experiments either on man or animals, but from the descriptions found in the books, and from the relation of some few cases to me, it seems to produce great irritation of the intestinal canal, gripings, prostrating emesis, and catharsis, an irritable and frequent pulse, and profuse salivation. These irritant effects are produced by a volatile principle existing in the green plant and root, which is mostly dissipated on drying. The effect of the green root or plant, or the fresh decoction of them, upon the mouth and salivary glands, resembles in a mild degree that of the Arum triphyllum, and the profuse salivation produced is principally the effect of the local stimulation, for salivation is but very slightly induced by the dried root or resin, unless it is given to its emetic effect; then it acts as emetics in general, and freely increases the secretion of saliva. It has been so frequently asserted that podophyllin produces salivation that I have taken much pains to ascertain its action in this respect, and I found when given in pills or capsules in small and frequently repeated doses, or in one large dose, that it has no persistent sialagogue action, and no effect like mercury, producing soreness of the gums, fœtor of the breath, and profuse and continued secretion of saliva. As I before stated, when given to its nauseant or emetic effect, it always induces a free secretion of saliva, but as its emetic action passes off so does its sialagogue action also. But if the resin is given in powder, so that it produces a local stimulation upon the glands, I have seen abundant secretion of saliva for one or two hours. In this way it is merely a topical irritant, not a true sialagogue. There are no means of ascertaining whether the resin when passed into the stomach in capsules can be detected in the saliva, but that it exists in the saliva, when administered by the mouth in powder, there can be little doubt, for the resin is soluble in the saliva.

Of the commercial podophyllin (of Messrs. Keith's manufacture) I have given two grains to a dog; in eight hours it had produced three free alvine evacuations. The same dose was repeated the next day, and it acted on the bowels in three hours, and during the day caused more than a dozen evacuations. To the same dog I administered by hypodermic injection, under the skin of the leg, one grain of podophyllin dissolved in liquor potassæ. It produced great local irritation, free purging in two hours and twenty minutes, evident colicky pains, and much tenesmus, with retching, but no vomiting.

To a man suffering with constipation of the bowels I have sprinkled two grains of the resin in fine powder over a large indolent ulcer. It caused a great pain in the ulcer, free catharsis in six hours, with nausea and severe griping pain. Within twenty-four hours it acted on the bowels seven times. The appearance of the ulcer was improved by the application.

Podophyllin, when administered to a person in health, is an efficient and certain cathartic; slow in its operation if administered in proper medicinal doses, but if administered in large doses quick and violent in its action, causing nausea, vomiting, and repeated and painful purging of mucous and bilious matters. When taken in powder in moderate doses it is not very disagreeable when first put into the mouth, but as soon as the saliva dissolves a portion of it it becomes disagreeably bitter and nauseous, and the sensation it leaves in the mouth and fauces is quite unpleasant: when taken in this way there is a free secretion of saliva for some time. When I have taken the powder finely rubbed up with sugar in this way there is no sensation experienced in the stomach for an hour or more, excepting the first sensation of nausea from the disagreeable taste. In about an hour, if it has been taken fasting, there is an uneasy feeling in the stomach, accompanied with nausea and free salivation. This lasts for about an hour, and it feels as though a large secretion of gastric fluid was being poured out, and the stomach feels as if in a state of commotion. Soon the influence is felt in the small intestines, and unmistakable sensations of the secretion of bile are experienced. In this stage of operation it produces on me exactly the same sensations as I experience from a full dose of calomel. The influence continues to be felt through the whole length of the intestines, producing active peristaltic motions, and the sensation as though acrid bile was freely passing. In about five hours one grain will purge me quite freely, and this is followed within two hours by two or three free bilious evacuations, producing upon me the same sensations and the same bilious-appearing alvine evacuations that I experience from the same proportionate dose of calomel. In this dose it does not gripe nor produce much tenesmus, but during the whole time of its passage through the intestines there is an unmistakable sensation of a dose of medicine producing a cholagogue effect within. If the same dose (one grain) is taken immediately after eating, and protected in any way so that it does not touch the mouth, no effects whatever are felt from it for two or three hours; then the effects in the intestines above described are experienced in a very modified degree, and the result will be one copious pultaceous evacuation. The after effects in both instances are an increase in appetite, and a feeling of better health. Most persons will require a rather larger dose of the commercial article than this, and many can take three grains.

Therapeutical Effects.—Podophyllin was first and most largely used by the "Eclectics," and many of them have written intelligently upon its therapeutic applications. By the Eclectics it has been called Vegetable Mercury, and its use has been recommended in all diseases in which mercury has been found to be of service. To a certain extent, and in some of its effects, it certainly does much resemble that drug.

Its greatest use is in that class of diseases usually called bilious disorders; that is, in those disorders where the whole digestive organs are deranged. In these disorders a dose of one, two, or three grains of the commercial podophyllin will be found to excite the secretion of all the abdominal organs, acting as an efficient purgative by this increased secretion. The largest number of patients whom we are called upon to treat are suffering more or less from these disorders, and it has undoubtedly been too much the case to give some mercurial for their relief. In these disorders podophyllin, combined in the manner we shall hereafter describe, is fully as efficient to cause a free secretion from the intestinal mucous membrane, and from the liver and pancreas, as any of the preparations of mercury, and it is infinitely safer. There is a very grave accusation made against our Militia Army Surgeons for using too much blue pill and calomel in these disorders, and although the accusation is an unjust one against the majority of the surgeons there are undoubtedly some against whom it is too true. Our soldiers, who are so much exposed, should not use mercurials if it can be possibly avoided, and this article will, if properly given in

these disorders, have a more beneficial effect, and will produce none of the evil consequences of mercury. There is but one drawback to its use, that is the inability of the patient being upon duty for ten to twenty hours after taking it owing to the nausea and tormina it produces if given in a full dose. In some of the forms of hepatitis it is of great value, and causes a full secretion of bile, but as this is not the only indication in the acute form of the disease it cannot be relied upon to check the inflammation. In chronic hepatitis I have found it of very great service, acting better than any other remedy I am acquainted with, as it relieves the portal circulation by its action on the secernents. In this disorder it is not necessary, in fact it is frequently injurious, to give it in large and powerfully cathartic doses; I have found it better to give it in small and frequently repeated doses upon an empty stomach, sometimes combined with veratrum or hydrocyanic acid, at other times with strychnia or capsicum. The amount of bile and intestinal mucous secretion carried off by treatment of this description is sometimes enormous.

There are few diseases in which it is of more service than habitual constipation. In this disease small doses taken with the meals (frequently in combination with strychnia and capsicum) will in the majority of instances relieve the disorder within two weeks. It needs but proper graduation to give it in just the proper proportion.

From its thorough action upon the whole intestinal mucous surface, and upon the large glands, it is one of the best eliminants in infantile convulsions. For the same reason it advantageously follows the use of anthelmintics.

But as from the experiments I have made with it I will endeavor to give its mode of action, I would rather leave its application in diseases to your own judgment. If you know its physiological and therapeutic action, you can apply it intelligently in the treatment of diseases.

Original Communications.

REMARKS UPON DIPHTHERIA.

By EZRA M. HUNT, M.D.,
OF NEW JERSEY.

We had occasion in a former number of the Medical Times to offer some thoughts on the phenomena and treatment of Diphtheria, illustrated by a short tabular history of a few prominent cases. It has been our lot still further to meet, and therefore our duty still more carefully to investigate, the character of the disease; and I propose, therefore, to add another brief article to what has already been said and written upon the subject.

The ardor generally manifested in the study and observation of this disease is a compliment to the energy and fidelity of the medical profession. The old Aristotelian philosophy formed theories, and then endeavored to make facts correspond thereto, and with a great deal of tenacity some medical authors have clung to the old organum. But the "Novum Organum" of Bacon, as applied to medicine, is inductive, in the sense that it forms theories only from facts submitted to the test of actual observation, and confirmed by treatment. This is just what we need, in order to advance medical science and to insure correct practice, and just what seems to be now the better tendency of medical pursuits. It is the method of investigation which seems to have prevailed in the study of this extraordinary affection. Coming to our country, so far as idiopathic type is concerned, as an entirely new disease, there was little time for vague theorizing, and medical men have been thoroughly intent upon its accurate examination, in its clinical aspect. Considering the difficulties which always must surround a rapid malign disorder, depending on some prevalent yet unknown cause, the results have been to a high degree satisfactory. Statistics show that even where it still prevails the average mortality has much diminished, and we are able to approximate to as definite views of treatment as lighten our pathway in dealing with most epidemic diseases. Although we possess few elaborate treatises, yet in medical societies, lectures, and monographs, the facts of the ailment have been fully discussed, and there has been with fuller experience a tendency to coincidence and correspondence of view as to its management, and a growing confidence in our ability to grapple successfully with it, where time is allowed for treatment. Without desiring permanently to multiply new nosological distinctions, for the sake of precision, we will speak of diphtheria as of three degrees of severity; and to avoid the mingling of Greek and Latin terms, in good plain English let us name them—mild, grave, and malignant.

The disease in the mild form has prevailed very extensively, if we may rely upon the evidence of a large and respectable number of the profession. An unusually large number of cases of throat affection have occurred in which, although there was no decided diphtheritic deposit about the fauces, there was still a general diffused redness spreading over the whole region, showing an epidemic character, accompanied with unusual debility, and requiring a tonic course. It certainly has seemed different from tonsillitis, from scarlatina simplex, from common sore throat arising from disordered stomach—or from bronchial affection—in fact, different from any usual anginose difficulty, as distinct as is mild influenza from common catarrh, and as are many other diseases from those with which they have points of resemblance. We have been careful not to call these diphtheria, and were at first disposed to regard them as merely incidental, and in some cases imaginary ailments; but so decided is the testimony of many excellent practitioners, as well as our own smaller experience, that we are constrained to regard this as a diphtheritic sore throat, or mild diphtheria. The view which classifies these cases as dependent upon a dilute and partial influence of the diphtheritic poison, is, of course, open to criticism, as it is always difficult to substantiate the character of a disease from its most attenuated forms. Mild cases of measles and scarlatina, mild variola and severe varicella, are sometimes difficult to diagnose; and it is true of the mild forms of many affections that we establish their identity with their more self-declarative species, by concomitant circumstances rather than by the decided symptoms of the particular case.

Sometimes even disease is so malignant as to be obscure in diagnosis. We remember seeing with another practitioner cases of scarlet fever, where five in one family died in succession, in but one of whom was there any eruption or decided throat trouble; yet others exposed by attendance upon them had plainly developed scarlet fever.

With such, or such like analogies, and with the facts before us as to the peculiar character and synchronous prevalence of this affection with decided diphtheria, its epidemic character, its occurrence in the same families, and at the same time with the full-fledged disease in other members, and the success of the same general line of treatment, we seem justified in the view of it until some other is rendered more probable. Under the use of chlorate of potash, a free diet, a daily dose of quinine, and perhaps chalybeates, the symptoms are not difficult to overcome.

The next division of diphtheria noticed is the "grave;" that which is typified in the usual decided forms of the disease. In its onset it is generally marked by some febrile excitement, not unfrequently accompanied with nausea or a chill, or alternations of chilly and over-heated sensations, and an uneasy feeling or soreness is complained of about the region of the throat. Examination within twenty-four or thirty-six hours after the first symptom of feeling unwell, shows the membrane deposited generally on one or both tonsils. This often spreads from various points, and uniting together they form a skin or covering, more or less exten-

sive. The exudation itself is almost pathognomonic of the disease, while the quick spiteful thrill of the pulse, as well as its frequency, points to a serious constitutional malady. As our design is not a full description of the disease, but only its outlines, it is not necessary now to trace all the frequent or occasional attendant circumstances. Of these, swelling of the maxillary, parotid, and cervical glands generally are among the most common local complications. The severity of the affection is sometimes out of all proportion to the amount of exudation, and day after day, in some cases, we see the patient succumbing to some secret morbid agency, even where the local trouble is not in its extent or mechanical embarrassment serious.

This second variety of diphtheria is the one in which treatment is most fairly to be tested. We have opportunity to contend with a disease sufficiently formidable, yet not invulnerable, and our general view of successful remedies must turn upon such cases. Some of them, even when severe, delightfully yield to the steady artillery of decided tonic treatment, while in others, the nervous system, and the stomach and digestive organs especially, seem so weakened, both in powers of digestion and assimilation, as to embarrass our communication with the system in our attempt to afford it tone and strength to outbattle the disease.

Let us illustrate what seems to us the general indication of treatment in a decided and severe case of diphtheria, where the stomach and digestive organs are in fair working order.

The patient is a mother who had watched at the death-bed of a child, who had just died of the disease in a malignant form. Forty-eight hours after, during the night, she awoke with an unpleasant sensation about the throat, and some fever. In the morning when the physician was called decided exudation was found upon one tonsil, which for two or three days continued spreading. The pulse was 110, nervous, and slightly feeble; bowels regular; stomach not much disturbed, save appetite impaired. The following is the general line of treatment:—Chlorate of potash ʒj.; aquæ puræ ℥ iij. Let the water be boiled, if hard, so as to secure the entire solubility of the chlorate. Dose, a teaspoonful every two hours, and to every other dose add fifteen drops of murias tinctura ferri. The same medicine continued for several days at intervals of two, three, or four hours according to symptoms.

Sulphas quinæ from three to four grains morning and night, varied in quantity or frequency according to signs of debility. In the case before us there was little variation, except occasionally a dose at midnight. Good digestible food three times per day—such as in hospital practice is called *extra*. Wine or brandy in tablespoonful doses once between meals, or at midnight or towards morning if much debility. A drink of pure milk if preferred. At night, if restless, or especially if the night before was a sleepless one, *twenty* drops of laudanum. The pulse for several days varied from 90 to 110, reaching at times 120, but under this treatment subsided to its usual frequency in about ten days.

(To be Continued.)

REPORTS ON SOME RECENT IMPROVEMENTS IN MATERIA MEDICA AND THERAPEUTICS.

By EDWARD H. JANES, M.D.,

OF NEW YORK.

III.

ANTAPHRODISIACS.

A RECENT number of the *Dublin Medical Press* contains the summary of an article by Dr. Lafont-Gouzi, published in the *Journal de Medécine et Chirurgie*, giving the results of a careful clinical inquiry into the effects of some medicinal agents, represented as special sedatives of sexual erethism, with a view of discovering some means of allaying genital excitement and consequent spermatorrhœa. He thinks cauterization has been too highly extolled, though doubtless applicable and efficacious in rebellious cases; but in most instances, the spermatorrhœa being the result of a too morbid energy of the organs of generation, should be treated by measures less capable of inflicting injury. He has found digitaline and lupuline alike inefficacious; but has been more successful with the bromide of potassium, two-thirds of his cases being either cured or greatly relieved by from fifteen to thirty grains being administered in two doses, in the afternoon, and continued for a fortnight. The particulars of three cases are related: the first, a student of divinity, took fifteen grains daily for five days, when the spermatorrhœa ceased, and has since returned only at distant and natural intervals. In the second patient, the orgasm was consequent on an eczematous diathesis of long standing, the eruption appearing around the anus. This was treated with cold water lotions and astringent hip baths; but the disappearance of the eruption was followed by pain in passing water, and by frequent seminal emissions at night. After vainly resorting to belladonna, digitaline, and lupuline, the bromide of potassium was exhibited, and effected a rapid and complete cure, for the permanency of which, the patient submits to an abundant eczematous secretion in the axillæ. In the third case improvement only was attained, the insufficiency seeming due to the inadequate manner in which the treatment was followed. Within a few years the bromide of potassium seems to have been coming into favor in the profession, as a remedy for this painfully annoying affection, and the paper just noticed not only confirms the good opinion entertained by many concerning the virtues of the remedy, but also discriminates in such a manner as to render the treatment effectual, by selecting those cases to which the treatment is best adapted, viz. those in which the difficulty depends on a morbid energy of the organs, requiring a direct sedative effect, both upon the muscular apparatus and secretory functions of the whole sexual economy. The bromide of potassium was first introduced into the London Pharmacopœia in 1836, it having been previously employed by Pourché and Magendie in the treatment of scrofulous affections, and by Dr. Williams, who regarded it almost as a specific in the treatment of diseases of the spleen. In secondary and tertiary syphilis its action is said by some to be similar to that of the iodide, but induced more slowly, and often unsatisfactory and unsuccessful. All who have given it a fair trial acknowledge its antaphrodisiac effects, and find it highly useful in priapism, nymphomania, and spermatorrhœa. Dr. Pfeiffer found it to have a happy influence over seminal losses, abnormal erections, and neuralgia of the neck of the bladder, and claims for it a special power over the muscular part of the genito-urinary apparatus, and the secreting action of these organs. It has also been found to exert a local anæsthetic action, producing complete insensibility of the fauces. Dr. A. B. Garrod (*London Pharm. Jour., Nov.* 1857) has found it adulterated with iodine, and thinks it by no means an unfrequent occurrence. The dose of the bromide of potassium for relieving painful erections during gonorrhœa, is from two to three grains every two or three hours. If pure it may be given in much larger doses. Dr. B. Woodard in the *Chicago Medical Examiner*, and Dr. Geo. B. Willson in the *Boston Med. and Surg. Journal*, claim for opium both diuretic and antaphrodisiac properties. Dr. W. mentions the case of a prostitute who was obliged to use opium freely, so that she should be passive during coition; and also of men for whom he had prescribed opium to enable them to overcome their lustful propensities, and always with benefit. He also mentions the case of an estimable woman who, ten days after confinement, became the victim of uncontrollable sexual desire, at once relieved by full doses of morphine, and solutions of morphine to the parts.

It should be remembered, however, that in a majority of patients complaining of spermatorrhœa, the disease is rather imaginary than real; in most instances the result of reading

those pernicious books with which the world is flooded, written professedly for the instruction and benefit of young men, but in reality as an advertisement for the author, whereby he expects to fill his purse, though at the expense of both the mental and physical anguish of his readers. A healthy young man, subject to occasional nocturnal emissions, is unfortunate enough to meet with one of these publications, and through the false impressions there imbibed, his mind is completely unhinged; the consciousness of a bad habit practised in his boyhood—though perhaps long since discontinued—tends to deepen his convictions, and the ghost of this youthful indiscretion, rendered more terrible by the exaggerated accounts given by the authors referred to, continues to haunt the poor victim with the increased frequency of seminal losses, followed by the usual train of symptoms, which invariably results from the pandering to the unhappy error of a diseased imagination. Judicious moral treatment, properly directed, with the view of convincing the patient that he is not ill, will, in a majority of these cases, prove more beneficial than drugs, either constitutionally or locally applied.

AUTUMNAL FORMS OF DIARRHŒA AND DYSENTERY.

Dr. Patrick I. Hynes, of Nottingham, advocates in the *Lancet* the employment of nitric acid and opium in the treatment of the autumnal forms of diarrhœa and dysentery. The treatment is by no means new, yet he thinks it is not so generally employed as its merits seem to warrant. The formula he employs is as follows:—Infus. gent. co. ℥viij.; tinct. opii ʒj.-ʒjss.; acid nit. ♏ xx. M. An ounce to be taken after every liquid stool, or painful alvine evacuation. A mustard plaster is applied to the epigastrium, and the sickness and thirst are relieved by drinking sparingly of ice-cold mint tea. He thinks nitric acid possesses some disinfecting agency, as well as astringent efficacy over autumnal diseases. Its fumes are believed to be capable of destroying the effluvia of typhus, and diluted with water it forms a useful drink in all low fevers. But independent of its chemical action over animal effluvia, the writer claims for it a direct astringent effect in all diseases of the mucous membrane; it being the chief agent in the nitrate of silver, so extensively used in all mucous discharges. He employs a similar formula with double the amount of acid, as a topical application in cynanche and diphtheria, with decidedly beneficial effects. It is also valuable in broken down constitutions impaired by mercury, syphilis, and other irregularities, and in combination with taraxacum will prove of service in sluggish conditions of the liver. He also employs it with advantage in diarrhœa of infants, and combined with muriated tincture of iron, in tabes mesenterica. He has given the other acids a fair trial, singly and in combination, but finds none of them equal in therapeutic value to the nitric acid in combination with opium. In a more recent number of the *Lancet* Mr. Keith Macdonald corroborates, to a certain extent, Dr. Hyne's statements, his attention having been attracted to the subject by the perusal of that gentleman's paper. He conducted his experiments in such a manner as to test both the real and relative value of the medicine, and found it to be more efficacious than any of the others, except sugar of lead and tannin. He considers it a useful adjunct to the more powerful astringents, though not to be wholly relied upon to the exclusion of other well-established therapeutic agents. He thinks, however, it is preferable to any other remedy in those cases originating in noxious effluvia, or specific poisons in the atmosphere. Neither of these gentlemen mentions having tried the treatment with large doses of ipecacuanha.

BELLEVUE HOSPITAL.—The following gentlemen have been appointed to the Resident Medical Staff of this institution:—H. W. Cook, —— James, T. R. Chandler, H. E. Paine, W. H. King, J. C. Stone, W. F. Peck, W. S. Ludlum, F. H. Howard, H. Raphael, J. V. Lauderdale, W. H. Ensign.

THE PRESENT

STATUS OF PSYCHOLOGICAL MEDICINE.

By I. PARIGOT, M.D.,

LATE COMMISSIONER OF LUNACY IN THE COLONY OF GHEEL, BELGIUM, ETC.

III.—Social Psychology.

BEFORE entering upon the special object of this communication I wish to pay a tribute of respect to the memory of a psychopathist, who left a name in the annals of American science, and has given a great example of devotion to his country—I refer to the late Dr. Luther V. Bell, the former much esteemed Superintendent of the MacLean asylum of Charleston, Mass. The high reputation of Dr. Bell, here and in Europe, rests on important publications belonging to the history of psychological medicine. The value of these works has been duly acknowledged by giving his name to a special form of insanity which he first described. But Dr. Bell was not only a psychopathist but also a surgeon, and at the outbreak of the Rebellion sacrificed repose, and afterwards life, in his self-devotion to humanity.

In order to appreciate the actual conditions and future prospects of the insane sufferers in this and other countries, we find it necessary to inquire into the popular feelings generally entertained respecting insanity, and also into the probability of relief being afforded in that proportion which is due them as compared with the other classes who are dependent upon public charity. This cannot possibly be better done than by a glance at our *social psychology.*

The degree of civilization of any nation is not at all proportionate to its refinement of manners, luxuries of life, fine arts, or even the material development of riches. It consists only in the knowledge of God, the practice of Justice, and the full possession of Liberty. The motives, then, which actuate such a community are founded upon the broad platform of a conscientious discharge of duty. If, then, our premises are right, the condition of the insane in all countries should be the test of the civilization. Now, it is true, much has been done for this class of unfortunates in the different states of the Union; great fortunes have been bequeathed to national institutions, and, on the part of governments, large sums are annually voted to build new ones, or maintain the old ones. But it appears that much still remains to be done. We have good reasons for such an assertion when we refer to a leading article of this journal on the necessity of creating a Commission of Lunacy. On this subject I would only venture in passing to call the attention of the gentlemen interested in this commission to one point, viz. the fundamental advantage derived from the possession of the LEGAL power, not only to inspect asylums, and report on them, but to regulate their administration. What is the advantage of inspecting always the same defects, if it is not in the power of such inspectors to remedy them? Reports are not only slow means to relieve sufferings, but by experience I know them to be *useless.*

But I have another fear, and that has reference, in the present condition of national affairs, to the probable check which may be placed upon both public and private benevolence. Then, again, the same cause acting still more must sooner or later tend to the destruction of a vast amount of property, the ruination of many individuals, and of necessity must increase the number of the insane.

Let us examine in the next place the cause of all these misfortunes. There is, no doubt, a curious sympathy existing in the ideal world between nations, which may be better understood, perhaps, by the use of the term moral contagion. The peculiar influences of this contagion are not confined by any mountainous districts, neither by the broadest seas. In fact, the poison is capable of propagating itself in a most mysterious manner. History records curious proofs of this assertion, in the foolish (if not criminal) enterprises of nations marked by all sorts of wickedness, and especially by aggressive propensities. From the

ancient times to the late wars of the first Napoleon, nations have been periodically subjected to an influence of this sort, and murderous battles have been brought on in consequence. During those times of woe society is unsettled, and political crises follow each other without interruption.

Nations, misled by political parties, have a mutual fear and hatred. Is that the way to rational progress? Amongst the recent delusions, one, owing to a remnant of our primitive state of savageness, is the revival of an absurd and brutal hatred between the Anglo-German and Latin races. Look at the amiable dispositions of the English and the French! Now, it is very remarkable that before 1852 such moral perversion was ridiculed as well in England as in France, and still they boast of their civilization! In spite of it one hears only of armaments, fortifications, and iron-plated vessels!

Now, on this side of the great ocean, what brought on this *war-inclination* in a nation whose interest it was to settle reasonably internal difficulties? Nothing else but that morbid contagion which in Europe has cost, the last ten years, more than a million of souls, and as much money as would be sufficient to educate a whole generation! Might it not be permitted to say to a psychopathist, with the Latin satirist, *Stultique prope omnes*, when he sees here a mighty and once prosperous nation drying up all its sources of prosperity, and extinguishing public and private benevolence in such a way that even the middle classes must be soon reduced to insanity and beggary? Let us hope, however, that our eyes will be open! It is true, also, that the sources of labor and industry are so abundant that peace would heal all our wounds—so may it soon be!

Let us now glance at the influence of social psychology on the preservation of moral faculties, and its effects on the cure of mental disturbances.

The history of the causes and development of insanity is about the same in all countries; little or nothing is heard of it in the first period of the nations. It appears that the virgin nature of the soil, and the activity of mind and body necessary to inaugurate a national existence, are favorable conditions for mental health. But when, with the course of time, their population is so much increased that space fails, when immorality has corrupted spiritual life, then, in the same manner that material poisons are developed within the tissues of the body, new morbid psychical dispositions give rise to mental disease. It has been asserted that civilization was the cause of insanity, but was it not easier to see that insanity only increases in proportion to the malignity of the moral and material poisons accumulated in what I would call the decline of societies? It is true, that often insanity has but an indirect relation to social psychology, that it is owing to the very struggles made to escape those conditions of decay, or to relieve others from their effects—great men have lost their reason in such struggles. In our opinion the hygiene of the mind and of the body in education and instruction, is the surest means of preserving reason and health.

Speaking generally, people are unaware of the conditions of the development of insanity. Many persons, even some physicians, believe in a sort of fatalism in its attacks. It is clear that such opinion is erroneous. Even hereditary predispositions are not necessarily followed by insanity. Happily it has been recognised that moral and physical precautions may prevent the appearance of such a disease. If such facts were popularized it would no more be considered a shame to have been insane, neither should the disease of a parent be a blemish on ancestral integrity.

The views respecting insanity are markedly different in the east of Europe and Asia as compared with any other countries. Insane persons there are looked upon as sacred beings inspired by the Divinity; though respected as such they are driven away as beggars, free to go and to do what they like best: still they are *harmless*, and do *no injury* to anybody. Now, what is the practice of western Europe? The first feeling, at the sight of a lunatic, is fear and repulsion; the consequence of such impression is not favorable to patients; they are considered lost for ever; the physician, if at all consulted, is called in sometimes when it is too late for hope. The patient getting worse, violent means are resorted to, having the effect of making him still worse, and at last rendering him incurable. Having admitted as a principle that an insane person is a dangerous being, liable to furious excesses, the insane are apt to conceive this false notion of power, and often are led by it to the commission of reprehensible acts. The consequence of this general opinion was also, anciently, that any treatment, however harsh (if it did not cause immediate death), was considered as a sort of retaliation of the evil done or MEANT by the unfortunate patient. Now, within about fifty years, physicians have put an end to these cruelties, but everybody feels satisfied that lunatics should be isolated from any intercourse with society. Again, the error of such principle has had another bad influence on public opinion—that is, the belief that medicine is useless to relieve mental aberration.

The only exception to that state, in Europe, is the Free-air Colony of Gheel, in which patients are boarded in private families. There, by the very reason we have mentioned, insane persons are quite harmless, on account of the kind treatment they experience. We are much gratified to be able to state that, in consequence of the reports of the Board of Lunacy of Scotland, *three asylums* are now in process of erection, in which the greatest number of patients will be placed as boarders in cottages kept by families under the direction of the asylum, which becomes, then, a mere therapeutical centre. It is easy to conceive what a blessing it will be for the patients. The following extract from a German paper will exemplify their effect on these unfortunates:—

"In a garden of Berlin a canary bird was found bearing on its neck a small note; the address was unusual—'To the good Lord!' The finder broke the seal, and found a sincere message in accordance with the direction. It was written by a lady, an inmate of a private lunatic asylum; the unfortunate one, pleading for relief, asked a speedy death. She complained that the misrule and self-will of a rude female attendant were the cause of her sufferings. All explanations to her relatives were vain, because this attendant attributed her complainings to a diseased mind, and punished her for attempting to make known her situation."

We must add, that having seen so many similar cases we have no doubt of the reality of such a statement.

We do not mean to say that the *free-air* asylums have no defects, or that they are the only resort for all kinds of insanity. I do not know of anything perfect, but I confess that for the majority of cases they are more beneficial. A new reform is now making its way in the world. The insane person was in ancient times considered as an offender, and treated accordingly; he is now considered as a dangerous being, who must be necessarily kept within an establishment. The new system consists in isolating these patients *in the country*, where they can enjoy free air and a family life.

We have tried to show in the above lines the moral and material state of society, and how its psychology has a great influence both on the *nature and treatment* of insanity. Our criticism is not so much directed against persons, as it is against public opinion; and still we must make an exception for this country, since we have learned from competent persons that no bad feeling existed either against the lunatics or against those physicians who devote their life to allay their sufferings.

Dr. OPPOLZER says that bicarbonate of soda is an improper remedy for pyrosis. It unites with the acids of the stomach, and produces salts which themselves produce pyrosis. He prefers the use of calcined magnesia, and sometimes uses carbonate of ammonia.—*Brit. Med. Jour.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, March 12, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

(*Continued from page* 223.)

ABSENCE OF ALBUMINURIA WITH CONTRACTED KIDNEY.

DR. AUSTIN FLINT presented a pair of kidneys removed from a patient who died at Bellevue Hospital. The history of the case as given was briefly this:—The patient was a female, æt. 35, who was admitted on Thursday last, the 6th instant. My attention was called to her on Friday, the 7th. She had had since her admission two epileptiform convulsions. She seemed a good deal prostrated, her mind was much enfeebled, and there was no œdema anywhere. I left the case without much attention that day, desiring that the urine should be examined before my next visit. On Saturday, at my visit, I learned that the urine had been examined, and that no albumen had been found in it. Another epileptiform convulsion occurred upon this day. On Sunday, at my visit, I found her comatose, and evidently very near her end. No previous history was obtained, and my knowledge as regards the details is rather limited. She died on Monday morning.

Autopsy.—The brain was examined this afternoon, and was found moderately congested and rather firmer than usual, otherwise it presented no morbid appearances. The kidneys were then examined; the right one weighed two ounces, the left a fraction more. The right organ presented a cyst of considerable size, as large as a marble, and when a section was made of it there issued a serous-looking fluid. The surface of the kidney is granular, and its secretory portion is very much diminished in size; a microscopical examination of it has not yet been made.

The interesting point of the case seems to be the occurrence of uræmia, proving fatal without any albumen in the urine, or general dropsy. I may remark that a case somewhat similar to this came under my observation during the past winter at Bellevue. The patient died with well marked symptoms of uræmia, and without any general dropsy: that patient had albumen in the urine, with casts of considerable size both granular and waxy. In this connexion I call into mind another case. The patient had no general dropsy, and the presence of albumen in the urine was ascertained rather accidentally; subsequent to this there was an attack of uræmia, which proved fatal. In both these cases there was found the hard contracted kidney. I may also mention a case of a child who had scarlatina, followed by an abundance of albumen in the urine, and also the presence of granular and waxy casts. The albumen finally diminished and disappeared, at the same time there was such an improvement in the patient's condition that she was considered safe. However, the waxy casts continued to be present, and the patient was soon seized with convulsions, which terminated in death in less than twenty-four hours afterwards. I am unable to give the microscopical appearances of the specimens I present, not having had, as yet, an opportunity of making the necessary examination.

DR. CLARK.—I will give them at a venture; these things are so uniform that the result of one examination hardly differs from another. I suppose you will find the intertubular tissue containing a larger amount of organized fibres than belongs to it naturally; that the Malpighian bodies will be, at least half of them, greatly shrunken, the capsules thickened, and the tufts within them dwarfed, and some will be entirely gone, at least in the kidney where the cyst was found. There will be found also between the tubes a considerable number of microscopical cysts, which, had the patient lived, would have grown larger, and a considerable portion of them would have been visible to the naked eye. A few tubes would be granular, but the cells would in general present their normal appearance, a very few being fatty.

As regards the absence of albumen in such cases, my impression is that it is the rule that albumen is not present, or if present at all, only for a short time. I have examined such cases month in and month out, at every visit, and have found that albumen was absent in the greater number all the way through, or perhaps only found during the last fortnight of life. And as to the latency of the symptoms, that too, it strikes me, is rather the law with this contracted kidney. I could cite instances where death occurred after a very few days, no disease being before suspected, in men who attended to business up to to within two or three days of death. I could also refer to two or three instances of merchants dying of convulsions, who attended to their business during the day, come home in the evening, were seized with convulsions during the night, and died the next day or the day after. There is one point that I would call attention to in regard to this contracted kidney, in which my own observation differs from that of Goodfellow. The question has presented itself to my mind whether he is right in ascribing these small kidneys, as a rule, to alcohol as a cause. I am confident that I have met with it quite often in perfectly temperate persons, and in those who only took their wine occasionally in company or when out to dinner. I would ask Dr. Flint if he knows anything of the previous habits of this patient?

DR. FLINT stated that he did not, and further remarked in connexion with the statements he had previously made, that Dr. Richardson, who had recently published a work upon disease of the kidney, maintained that albumen was always present in this class of cases. Dr. Flint disbelieved this statement, and accordingly took the opportunity of citing a case in point.

DR. CLARK. There is another point which I suppose will shortly occupy the thoughts of the members of the Academy of Medicine; that is, the real value of casts in those cases where no albumen exists, and where no disease is suspected, until for some particular reason the urine is examined. The specific gravity may be normal, and the urine may perhaps contain the penicillum glaucum. I feel a good deal of confidence that this is the disease illustrated in this specimen, and if so, the fact is of importance in enabling us to anticipate an issue which we have no other means of looking towards.

BRIGHT'S DISEASE INDUCED BY ABDOMINAL DISEASE.

DR. CLARK.—I wish to call the attention of the Society to the relations existing between the large white kidney, one of the forms of the disease we have been considering, and other diseases of the abdominal cavity. Dr. Krackowizer alluded just now to the influence of moderate pressure in the neck in producing contraction of the pupil; and I would remark here that it has been suspected for some time past by those who have directed their attention to the study of Bright's kidney, that diseases, chronic chiefly, of the abdominal viscera, are capable, by the connexions of the sympathetic system, of establishing disease of the kidney. It is not long since I had the opportunity of marking the progress of Bright's disease occurring in the course of adhesive inflammation, and its effects in the pelvic cavity; the uterus becoming adherent by a slow, gradual process to the posterior tissues of the pelvis, and all the organs bound down in one mass, almost as if it were a case of tuberculous peritonitis, and the pretty rapid development of Bright's disease of the kidney, this latter terminating fatally, while the other disease might not have been fatal. It occurred to me then that it was possible that, through the irritation that the sympathetic nerve experienced in this pelvic cavity, the kidney became diseased.

Of the two last post-mortem examinations made in private practice one was of a character to be brought in comparison with that case. I have a portion of the intestine

here, and will give the history of the case. I will anticipate so far as to say that the patient had chronic diarrhœa for a period of four years, and the portion of intestine will almost explain itself. It is also important to say that she had tubercles of the lungs. It is not the usual form of tuberculous ulceration of the intestines confined to the patches of Peyer, but has no special locality. The history of the case then is this:—A lady, æt. 33, enjoyed good health until eight years before death, when cough and hæmoptysis gradually developed the symptoms of tuberculous disease of the lungs. From these symptoms, after a little, she recovered so that she became quite stout and looked very healthy. She was then married, and had one child, who is now five years of age. Her cough occasionally troubled her, but she had no hæmoptysis during the rest of her life. About four and a half years before her death her cough returned, and became habitual: it was not, however, associated with symptoms that bore very heavily upon her, and she maintained her health tolerably well until four years ago, when she was seized with diarrhœa. From four years ago until the time of her death, she had the diarrhœa almost all the time. It would sometimes be stopped for a fortnight, and then be renewed and continued for weeks and months at a time, though it was not of a severe character, until within the last few months. Last spring I saw her on account of severe pains referred to the stomach, which I explained on the supposition that there were biliary calculi passing. She got entirely rid of those pains after a short time, but her tubercular symptoms continued. During the last winter the diarrhœa increased upon her, and her strength pretty rapidly failed. It was noticed here, as is commonly the case, that the cough which was oftenest distressing alternated with the diarrhœa; when there was diarrhœa her cough troubled her but little, and when the diarrhœa was restrained, as it always could be by the sub-carbonate of bismuth, the cough would be very urgent at night, and as morphine did not seem to agree with her well it was often very difficult to find sleep for her. She became gradually thinner and paler, and about the 1st of January took to her bed, and kept it until the day of her death. In the mean time the peculiar appearance of her countenance led me to examine her feet, hands, and face, in the expectation that I should find œdema. Up to this time no examination of the urine had been made—no albumen was found. About a month or five weeks before her death her feet began to swell, and soon after that her hands became very puffy, the œdematous tumor making a very marked prominence on the back of them. About three weeks before her death she fell into a lethargic state, in which she continued for four or five days, the diarrhœa continuing and amounting to four or five stools a day. By inducing free perspiration, by means of foot baths, she was relieved from this lethargy, and enjoyed the full possession of mind for a week or ten days longer, when she became again somewhat lethargic, and three days before death, the œdema having all disappeared, she was seized with convulsions, and these were repeated to the number of twenty-two in a period of sixteen hours. After the convulsions she did not recover her consciousness, and died about twenty-four hours after the last had ceased, in a comatose condition, either from the effusion of watery fluid in the cerebral cavity, or from the deeper influences of the urea in the blood, or the congestive action produced by the epileptiform convulsions of which she had had so many.

The friends were considerate enough to ask if I desired a post-mortem examination, I having had, on account of the absence of her physicians, the principal charge of her during the last weeks of her life. The examination was made of all parts except the head. The lungs were only moderately tubercular, and the breaking down of tissue was not considerable. There was a moderate amount of effusion in the serous cavities, as is common in those who die a protracted death, whose symptoms are analogous to hers, especially when the blood is watery. The intestines were found ulcerated through yards of their extent. On the inner surface the ulcerations were not regular, but were grouped irregularly on the outside of some of Peyer's plates; on the peritoneal surface could be seen distinct tubercles, the neighboring tissue being vascularized. The liver was fatty, the heart moderately fatty. These, I believe, were all the lesions noticed, with the exception of what was found in the kidneys. These organs were very pale, portions of them nearly as pale as the surface of the body, and had a sort of cadaveric look. In one of them the vascularity had become changed from that regular arrangement which is recognised as the normal distribution of the vessels upon the surface, to a stellate aggregation of them. On section the pyramids were about their natural color, and contrasted very strongly with the whitened tissue of the cortical portion. The kidneys were not enlarged. Under the microscope there were worlds of granules, in the place of epithelial scales and sound cells; there were also nuclei in abundance, and a slight amount of fatty degeneration of the cells.

Dr. Clark had reason to believe that the degeneration was recent, and that its cause could be traced to the ulcerative disease of the intestine. He remarked that the point was not new with him, as it could be found stated in the work of Goodfellow. He then proceeded to relate the second case as follows:—

The other case was also one of Bright's disease, in the practice of Dr. T. M. Cheesman, and one which gave to the physicians a great deal of trouble in regard to diagnosis. The cause of death was interesting. The case I will give in a few words:—A gentleman, æt. 35, of temperate habits, and pretty well known in New York, about eight weeks ago, found himself sick enough to abandon his business, and take to his house. Pretty soon after this he was obliged to take to his bed; feeling exceedingly weak, looking pale, and losing flesh, he still had not for a long time a single positive symptom. At length it was ascertained that there was blood in the urine, and that he had had rheumatic pains in the wrists and leg. Beyond these pains, called rheumatic, he really did not suffer except from what might be called prostration; he felt faint, had often no appetite for food, and his digestion was very poor. Gradually he lost his strength, his pulse became more and more rapid, and a week before his death I saw him with his physician. At that time expecting when I went to find a case of fever, although it was not stated to me that that was the disease, I was surprised to find that peculiar and characteristic paleness so commonly met with in Bright's disease. I then expected, of course, to find albumen in his urine, although there was not the least œdema about him. A portion of the urine was taken home for examination, and was found of high specific gravity, 1023 or, 1024; no albumen could be detected. There was a very abundant yellowish sediment, which to my surprise consisted of a vast quantity of uric acid, in lozenge-shaped crystals, of very small size. No casts could be found, perhaps on account of the abundance of this precipitate. On the second visit I was obliged to say that I did not know what was the matter with the man; I had before thought that there might be Bright's disease, but there was no symptom that was clear, except only the complexion. The urine had failed to give us any satisfaction, but I thought it important to examine the secretion at every future visit, so as to discover over any changes that might throw light on the case. But while in consultation we heard this gentleman call aloud as if suffering from pain; knowing, however, that he was just about to have a stool, and supposing that the pain might be occasioned by raising him to place the bed-pan under him, it did not excite our apprehensions. When, however, the call was once or twice repeated, the attending physician went in, and in a moment returned, asking me to go in with him. We found the patient's pulse almost extinguished, and his lips if possible were a little more blanched than before. His eyes rolled involuntarily, and he seemed as near syncope as could be. We gave him some brandy, and this revived him sufficiently to enable us to

hope that he would go through the oppression, the cause of which did not occur to any of us. Reviving considerably I was obliged to leave him, but the attending physician remained. He soon found, however, that brandy did not sustain, and in about an hour after the patient ceased to breathe.

Post-mortem Examination.—Lungs healthy, and heart healthy, with the exception of a slight fatty degeneration (Quain's). The liver was a little yellowish, though not enough diseased to account for symptoms. The intestines were entirely healthy; the thing, however, that struck us on opening the abdomen was a sheet of coagulated blood, lying immediately in contact with the anterior wall of the abdomen, overlying the omentum, and also the surface of the intestines. This was gathered up, and we estimated that the whole amount of blood lost, including the serum, was about three half pints; this we considered sufficient to destroy life in a man so feeble previous to his last sinking. It was a point of great interest to ascertain where this blood came from. We were not obliged to search very long before we found this little tumor in the omentum, about one inch below the transverse colon, and nearly central in the body. No artery was seen running towards it of sufficient size to form an aneurism, and our first thought was that it was probably a vascular tumor, that is to say a malignant tumor; but before examining it we searched elsewhere in the abdominal cavity, believing that if it was really malignant we should find others of a similar character; but we found none. We then cut it open, and found that it had a cavity containing a clot; in other words it was an aneurism, which was opened by a rent into which a common director could easily be passed. It was plain that this gentleman had died from hæmorrhage, and that the hæmorrhage was from that small tumor that had burst about the time we left the room, very likely as the result of an effort upon the bed-pan.

The kidneys were found considerably enlarged, were of the pale appearance just alluded to, and the vascularity upon the surface had undergone material changes. Under the microscope the same appearances as in the preceding specimen were found, but very much more marked. It was very difficult to find a single perfect cell, either in the tubes or pressed out of the tubes. The few that remained were most of them loaded with fat. The case is perhaps interesting in connexion with the specimen presented by Dr. Flint, as one in which the evidences of Bright's disease were so few that both of us felt compelled to say that we did not know what was the matter of the man. The aneurism is certainly a rare one in this position; I do not know how frequently they are found the cause of death, but I am sure not very often. Examined by the microscope, the walls of the tumor were found to consist of the condensed areolar tissue found in the coats of arteries.

Dr. Sands did not know of any vessels of name in that particular locality, where the aneurism was found; the omentum was supplied by branches of the gastro-epiploic arteries, which were very insignificant in size.

In answer to a question by Dr. Bibbins, Dr. C. stated that no atheromatous deposit was found in the large arteries.

Dr. Sands stated that, since the last meeting, he had an opportunity of making a microscopical examination of the intestinal tumor presented by Dr. Loomis, and had found it to be cancerous in character.

Dr. Voss had also made a similar examination and had come to the same conclusion.

EXTIRPATION OF AN ATROPHIED EYE-BALL, TO CURE SYMPATHETIC INFLAMMATION OF THE OTHER EYE.

Dr. Noyes presented an eye which he had the same day removed from a colored man, æt. 53 years. The eye had been diseased for three years. It became inflamed spontaneously, and in a few months sight was lost. Its inflammatory state never entirely disappeared, but while at times quiescent again it became severe. This continued for nearly three years. Since the beginning of winter, that is, since four months, the other eye, which had remained sound, began to lose vision. A mist hung before it, and muscæ volitantes sometimes appeared. On examination the lost eye was found atrophied, and sunken into the orbit. There were some large venous trunks coursing over the sclerotica. The globe was soft and tender; and slight pressure with the finger gave decided pain. There had always been more or less supra-orbital and temporal neuralgia.

To arrest the failing sight of the good eye extirpation of the opposite was immediately urged, and after two days performed after the method of Bonnet.

At the dissection the globe was found cuboidal in form, its antero-posterior diameter being $\frac{13}{16}$ of an inch. When the sclerotic and choroid were incised a yellowish fluid escaped, which upon fuller dissection was found to have been between the choroid and retina, and the retina to be completely separated from the choroid except at the ova-serrata. The centre of the globe was occupied by a rounded elastic tumor, to which the retina was closely applied. The tumor appeared to be solid, and on cutting it open was found to be so. It was whitish, and laminated in some degree. No traces of normal vitreous humor remained. The tumor appeared to be a mass of inflammatory exudation. Upon one point of the choroid the commencement of calcification was discovered. The crystalline lens had disappeared. The iris was wrinkled, and adherent to the mass occupying the vitreous chamber, the pupil being occluded. The cornea had scarcely more than half its usual diameter, and was opaque. A narrow anterior chamber remained.

As a note to the case, I may add, that the patient declared his vision to be improved on the day after the operation. Upon the sixth day he was allowed to go home, and he asserted that his sight was a great deal clearer. Examination was not made with the ophthalmoscope, neither was his reading power accurately tested.

American Medical Times.

SATURDAY, MAY 3, 1862.

FAILURE OF THE HEALTH BILL.

We have again to announce the adjournment of the Legislature of this State without the enactment of the New York Health Bill. As there has been a wide-spread interest in this measure, it is but right that we should explain the course of legislative action in regard to it, and the causes of its ultimate failure.

At the commencement of the session three health bills were introduced:—One drawn up by a joint committee of the New York Academy of Medicine, the New York Sanitary Association, the Kings County Medical Society, and a Citizens' Association of Richmond County. This was the Metropolitan Health Bill, which erected these three adjoining counties, embracing Quarantine, into a Health District, having a Central Board of Health, the majority of the members of which were medical men, and the inspectors throughout the District were also medical men. The *second* Bill emanated from the Police Department, and was essentially the same as the first, except that the governing power was the Commissioners of Police. The *third* Bill was concocted at the City Inspector's office, and was designed to retain that eminent official in power.

The session opened with a strong feeling in favor of health reform in New York; for five successive years this subject had been urged upon the attention of the Legislature with all the logic which our inexorable death statistics convey to the impartial mind; and nothing now seemed wanting to attain those enactments which would render New York the healthiest city on the globe. What now gave peculiar effectiveness to the efforts of the friends of reform was the spread of contagious diseases, and especially small-pox, from New York to country towns, and also to the army by the regiments which passed through the city. The country towns of the State, and several of the cities of other states, as Providence (R. I.), New Haven (Ct.), Jersey City (N. J.), represented to our Legislature that their respective communities were constantly infected with diseases derived from New York city; and asked the enactment of laws for the control of preventable diseases in the commercial metropolis of the country. The Governors of several States made similar communications to our State Government. No measure had the strength of the Health Bill during the first half of the session, and all predicted its certain passage, except those who are familiar with the secret but all powerful influences which control Albany legislation.

The several bills were thoroughly canvassed by their friends before the Committees of the two Houses, and finally a joint committee drew up a Bill which contained the distinguishing features of the first Bill above sketched. This Bill passed the Assembly by a constitutional vote. It went into the Senate with the fairest prospects of triumphing over the corruption fund, which was this year swelled to an enormous amount, and which had already begun to make the weak-knees of certain extremely *conscientious* country members tremble. But at the very threshold of the Senate the bill met an enemy more powerful for its defeat than even the corruption fund, and that was the person of His Honor, Mayor Opdyke, who had joined hands with the bitterest enemies of the measure, and declared through his attorney, that, unless the bill was so amended as to give him the power in its management which he desired, IT OUGHT TO BE DEFEATED. Amendment at that late day was known to be its certain defeat. The friends of the bill were astounded, nay, bewildered by this announcement; the report was regarded as incredible. Mr. Opdyke had, previously to becoming Mayor of New York, been a warm advocate of the Health Bill, and had personally, in former years, gone before the Legislature to urge its passage. Besides, a delegation of citizens waited upon him early in the session, before the bill was drafted, to secure his co-operation during the winter, and desired to place him in such relation to the measure as would best subserve the interests of the city.

But the report proved to be too true; Mayor Opdyke had really joined the "Ring" that by corruption, falsehood, political intrigues, and every unseemly device, annually unites in unholy bonds to defeat this most righteous measure. At once the wavering, who were bound by every moral obligation to sustain the Bill, but who had been tampered with and only wanted some scapegoat to hide their shame, welcomed the proffered protection of the Mayor, and became its subtle opponents. Lieut.-Gov. Campbell, heretofore a warm and consistent friend of the Bill, Senator Abbott, of Cayuga Co., Senator Truman, of Steuben Co., Senator Angel, of Allegany Co., are among the number whose real convictions of duty were plain and unmistakable, but who now disregarded every consideration of justice and humanity, and took counsel only with the demon of party prejudice. The Health Bill was a failure from the moment the Mayor produced this defection in the ranks of its nominal, and but for his personal persuasion, actual supporters. Thus were crushed, in a moment, the long-deferred hopes of the benevolent and philanthropic of our city; and thus at one ruthless, heartless dash of official power, the fruits of years of self-sacrificing and disinterested labors were blighted. It is proved to a mathematical demonstration that at least 9,000 of our laboring poor die annually, that would be saved by the enforcement of the provisions of the Health Bill just defeated. Who will not commiserate the man that in later life will have to reflect that for personal gain and political power, which will doubtless turn to ashes in his grasp, he sacrificed the lives, health, happiness, and well-being of tens of thousands of his fellow-men?

Such is the simple story of the defeat of the Health Bill in the Legislature of 1862. While we would hold up to the scorn of our citizens the thrice guilty authors of this great public calamity—for in no other light can it be viewed—let us do all honor to those members of the Legislature who advocated the Bill with unanswerable arguments. From this district the Hon. Mr. Benedict and Senator Smith, of Kings co., Speaker Raymond and the Hon. Royal Phelps, of this city, and the Hon. Mr. Ely, of Richmond, deserve and will receive the lasting gratitude of every philanthropic citizen. We cannot forbear to notice the noble stand of Messrs. Phelps and Ely, who both belonged to the party which would be most seriously affected by the passage of the Bill, yet who declared that when such a great public measure came before them as legislators, they would disregard all mere party obligations, and give it their unqualified support. In what striking contrast do such declarations of duty appear with the pitiful apology with which Mayor Opdyke attempts to justify his defeat of the Bill! Of the country members who especially interested themselves in the Health Bill, we may mention, not invidiously, Messrs. Pringle, Bowen, Stetson, Pryne, and Senators Tobey, Montgomery, Munroe.

CHANGES IN THE MEDICAL BUREAU.

From the commencement of the present war we have been zealous advocates of a reorganization of the Medical Department of the Army. In this matter we have taken no counsel of individuals, nor have we allowed the interests of individuals to control our judgment. We had long been familiar with defects in the Medical Bureau, and these we have sought to remedy in the only practicable manner, viz. by that reform which the exigencies of our times imperatively demanded. Our sole aim has been to place on a broader and more scientific basis this arm of the public service, which should be all-powerful for good. In the consideration of the questions growing out of this discussion no reflections upon individuals have been made, and no criticisms of delinquencies in official stations have been indulged in to give effect to arguments. For the Medical Staff as a body we entertain the most profound respect and fraternal feeling, and have always deemed it a most pleasurable duty to bear our testimony to its high professional character. With rare devotion to the highest prin-

ciples of medical morality, the corps has maintained itself free from all forms of charlatanry, which nowadays succeeds in creeping covertly into nearly every organization. Great as are the personal sacrifices which medical men are often compelled to make in civil practice, they bear no comparison to the almost constant laborious duties, self-sacrifices, and deprivations, which have been the daily lot of the entire Medical Staff of our Army hitherto. Many a young man of the first talent, and the most thorough educational qualification for attaining position in civil life, has entered the Staff and spent his early and maturer years on outpost duty, far removed from the refining influences of civilized society, and totally deprived of every opportunity for professional association and improvement. We should be wanting in the common instincts of humanity, and much more in that appreciation of true merit which should ever characterize our profession, did we fail to recognise and acknowledge the claims of the Regular Medical Staff of the Army to professional and public consideration.

The reforms that have been sought are obtained, and the Medical Department is placed on a new footing. Important changes must be made to give that wider scope and efficiency to its service which the Act of Congress contemplates. An Assistant Surgeon-General is to be appointed, and the entire Bureau of Sanitary Inspection is to be organized. For the former position no one of the senior surgeons has the qualifications by familiarity with the details of the department, of Dr. Satterlee, and Dr. R. C. Wood, the late acting Surgeon-General; and of the juniors, Assistant-Surgeons Edwards and Coolidge would have the most available and practical knowledge of the duties of the office. The Bureau of Sanitary Inspection will be organized, we trust, by placing at its head as eminent a representative of the Volunteer corps as now represents the Regular Staff at the head of the Medical Department. Many names will suggest themselves to every reader, the most prominent being Hamilton and Lyman; while for the eight inspectorial offices the names of Cuyler, Cooper, J. H. Bailey, Tripler, Vollum, of the Regular Staff, and Dalton, Clymer, Andrews, and Suckley, of the Volunteer Corps. But we have no wish to forestall the selection of the President; that his action will be judicious, we have abundant proof in the appointment he has already made to fill the highest office.

We may add, that whatever appointments or changes may be required to give efficiency to the Department, we trust such consideration will be given to the senior members that they will have no occasion to regret the reform that has been inaugurated. Many have grown old in this ill-requited public service, who in civil practice might have attained to pecuniary independence. In every position to which they have been called, they have discharged their onerous duties without consulting personal interest or comfort. During the present struggle of our Government, the senior members of the Staff have displayed the most praiseworthy zeal in the several departments to which they have been assigned. Their ripe experience has been of infinite service in the proper direction of the early voluntary efforts of citizens to supply our improvised armies with necessaries, as well as in the subsequent systematizing of the medical affairs of the Military Departments. The citizens of this city will not soon forget the untiring efforts of Dr. Satterlee, the Medical Purveyor at this station, during the early military movements of this war. He was ever found ready to co-operate with the citizens in the military preparations of the volunteers, and to his advice and suggestion we owe much that was so opportunely done to prevent subsequent suffering.

From other departments we hear the senior member of the Staff spoken of by the surgeons to the volunteer forces in terms of unqualified commendation. Dr. Cuyler, at Fortress Monroe, has directed the medical administration of that station with consummate ability; in the Southern Department Dr. Cooper has been equally efficient, and the same may be said of Dr. De Camp, and the energetic Purveyor Dr. J. H. Bailey, of the Western Department. It will, we believe, gratify the younger members of the Staff, and of the medical profession at large, to learn that the senior members are placed in such positions as will be agreeable to them, and render their service most useful to the country.

THE WEEK.

The annual Tax Levy of the city of New York, which has just passed the Legislature, contains the following *items* for salaries of the functionaries who have the public health of the city in charge:—

Salaries.—City Inspector's Department.—For salary of the City Inspector, and of the Officers, Clerks, Messengers, and Inspectors attached to, or connected with, his office, and in each of the bureaux and offices in said Department—One hundred and nineteen thousand two hundred and twenty-eight dollars . .	$119,228 00
Salaries.—Commissioners of Health.—For salaries of the Resident Physician, Health Commissioner, and the Clerk of the Board of Commissioners of Health—Four thousand two hundred and fifty dollars	4,250 00
Board of Health.—For the compensation of the Resident Physician for his services as Agent of the Board of Health, and for expenses which may be incurred by said Board beyond the amount provided for under other heads of account—Six thousand dollars	6,000 00
Total . .	$129,478 00

It appears, therefore, that this city is to pay during the current year, 1st, nearly $120,000 to support the vulgar crew of emigrant runners, barkeepers, policy dealers, rum-sellers, and loafers, who make up the 138 officers, clerks, messengers, and inspectors attached to, or connected with (significant expression) the City Inspector's office, and who have in special charge the public health of New York; 2d, upwards of $4000 is to be paid to the Resident Physician, Health Commissioner, and Clerk of the Board—Officials who never return to the city one farthing's value of services; 3d, $6000 for the compensation of the Resident Physician for his services as agent of the Board of Health, etc. As the Board of Health never meet, the Resident Physician of New York enjoys a very comfortable sinecure, having literally no other official business to perform than sign the quarterly pay roll, and pocket his unearned salary.

This gigantic system of public support of a class of political sharpers, under pretence of preserving the public health, the Metropolitan Health Bill (which they have just defeated, with the aid of the Mayor) was designed to overthrow. Although it would have embraced three counties in its operation, the limit of its expenditures for salaries would not have reached $60,000. It would be greatly for the

interest as well as the health of the city if every vestige of this health organization were obliterated. One fact is certain; a large number of pauper politicians would then be left without any visible means of support, and would be compelled to seek a more honest livelihood, or that final resting-place of their class—the Almshouse.

—

We have noticed the fact that in some of the European armies the soldier is provided with appliances for temporarily meeting the exigencies of the battle field. Everyone is supplied with bandages and a small tourniquet which his comrade can use, or which is at hand when the dresser reaches him. The moral effect which those provisions against sudden accidents have, is very great, and should be carefully attended to by every Government. Our attention is again called to this subject by the ingenious tourniquet illustrated in another column. It is cheap, is easily applied, and does not so surround the limb as to interfere with the venous circulation. Such an instrument should be supplied to every soldier about to go into battle.

—

Among the passengers by the last steamer to Europe was Prof. Charles A. Lee, M.D., of Peekskill, N. Y. Prof. Lee intends to visit the medical institutions of Europe, and will eventually extend his travels to Greece, Egypt, and Palestine. We expect to have the pleasure of laying before our readers frequent communications from this distinguished member of our profession.

—

The New York Sanitary Association has recently had under discussion the subject of compulsory vaccination The results of its deliberations are embodied in the following resolutions:—

The series of resolutions in respect to vaccination and revaccination, laid on the table at the last meeting, were taken up, discussed, and in the following amended form adopted.

Whereas, This Association, after mature deliberation, has become convinced that vaccination and revaccination, as often as every seven years, is necessary to protect this community against small-pox, therefore,

Resolved, That in the judgment of this Association, further legislation is imperatively required to secure a more general and effective vaccination, but so framed as to avoid offensive compulsion if possible.

Resolved, That, in the opinion of this Association the Board of Education, or the Legislature, or whatever body is necessary, ought to pass and enforce an ordinance prohibiting the attendance in all the schools receiving any part of the public moneys of any children who have not been well vaccinated, or variolated within seven years, or who cannot show a valid certificate to that effect, giving the date of the vaccination or variolation.

Resolved, That in the opinion of this Association the Metropolitan Police Commission should cause all policemen, or others under their employ, to be vaccinated, or show a valid certificate or proof of vaccination or variolation within seven years.

Resolved, That measures should be taken for the passage of a law compelling the vaccination of every prisoner shortly before discharge.

Resolved, That in the opinion of this Association the Commissioners of Charities and Correction, as well as all other bodies having the care of the poor, should comply with the above rule in all institutions under them, and withhold all in or out door relief of any kind until vaccination is performed, or the dates of previous vaccination ascertained, and that the Legislature should make the same a feature of all chartered institutions.

Resolved, That it should be made necessary that every person affected by the above ordinances shall be required to procure and preserve a vaccine certificate, properly filled out and dated.

Reviews.

A System of Surgery; Pathological, Diagnostic, Therapeutic, and Operative, by Samuel D. Gross, M.D., Professor of Surgery in the Jefferson Medical College of Philadelphia, etc. Illustrated by twelve hundred and twenty-seven Engravings. Second Edition. Much enlarged and carefully revised. In two volumes. Blanchard & Lea. 1862.

We are much gratified to be able to announce a new edition of this Cyclopædia of Surgery. Considering the large size of the work and its expensiveness, the extremely rapid sale and exhaustion of an entire edition, not only proves the value of the work, and its adaptation to the wants of the profession, but it speaks well for the intelligence of American surgeons. The Second Edition bears evidence of careful revision, on nearly every page; and whole sections of new matter prove with what care and pains-taking the distinguished author has labored to render his work worthy of the patronage of the profession. We cannot enter into even a specification of the additions which have been made, but will simply add that the work is still the most complete exponent of the science and art of surgery in our language.

Scientific Brutality.—The first case, I think, is characteristic of the genius of the man (Maissonneuve): viz. amputation of the forearm by the use of the *flèche*. I did not see it myself, as it occurred in summer, but the details have been furnished to me by a friend who was present on the occasion. The first step in the operation was the breaking of the bones, which was accomplished in the following manner: two blocks of wood, at a short distance from each other, were placed upon the arm, then a curved iron bar was passed *beneath* it at the part corresponding to the interval between the blocks, while a small chain extended from one end of the bar to the other *over* the arm, and was attached to a screwing apparatus, by means of which the bar was gradually forced upwards, and counter-pressure was made upon the blocks, until at last the two bones were compelled to give way; this was done without chloroform. The *flèches* were then introduced into the flesh in a circular manner round the circumference of the arm. The patient succumbed in about a day thereafter. The amputation was performed for some affection of the hand, from the effects of which the patient would have died in a short time at any rate. What was the object in performing the operation in this somewhat novel manner, my friend could not inform me, unless it was as an *experimentum crucis* (Dr. W. Turner in *Edin. Med. Journal*, March, 1862.)

M. Piorry, in a most severe and dangerous case of nasal hæmorrhage, which had resisted all the ordinary methods of treatment, and had continued for several days, arrested the hæmorrhage in the following way. Reflecting upon the fact that he had at times arrested pulmonary hæmorrhage by causing the patient to draw deep and frequent inspirations, he thought that the plan might be adopted in this case. He therefore made the patient sit down, removed the charpie plugs, and ordered him to breathe deeply and quickly. The hæmorrhage ceased almost immediately, to the great satisfaction of the professor and his pupils. Ligatures were then applied for a time above the calves of the legs and above the fore-arms. The hæmorrhage did not return.—*Brit. Med. Jour.*

Recent Inventions.

NEW APPARATUS

FOR THE

TREATMENT OF FRACTURES OF THE LONG BONES.

By JOSEPH H. VEDDER, M.D.,

OF FLUSHING, L. I.

In the Medical Times, of January 12, a new apparatus was presented for the treatment of morbus coxarius, that recommended itself for simplicity. The mechanical contrivance then described, may be so modified as to have a wider application in the treatment of certain fractures of the long bones and affections of the joints in which the above indication is to be met.

Fractures of the Thigh and Leg.—The adjoining cut represents a long splint for fractures of the thigh and leg. It consists of a strip of wood in two fragments, three and a quarter inches in width, extending from the crest of the ilium to a distance four inches below the sole of the foot. On the external surface of the splint, at a point corresponding with the knee, is fastened a hinge with a detachable pin. To the upper fragment of the splint, on the inside, is fitted by a pivot, a thin steel plate seven inches in length, and in width the same as the splint. On the lower surface of the plate is fixed a button to slide into the groove seen on the lower fragment of the splint. By this arrangement at the knee, the splint may be folded together for convenience in packing when not in use. On the lower end of the splint, is fixed a narrow metallic bar, on which slides a box, having a pulley above, and a thumb screw below, by means of which *the line of extension may be suited to the axis of the limb.* On the outside of the splint may be seen two depressions guarded by a steel plate, so arranged that the ratchet plate may be firmly applied and removed at will.

Fig. 1.

The *extension ratchet pulley* consists of a metallic plate, having two buttons on its lower surface, to correspond with holes on the splint—on the centre of which is fixed a grooved wheel, smooth on its inner edge, and ratcheted on its outer edge. This wheel is revolved by

Fig. 2.

means of the thumb plate or lever, and is secured at any desired point by a spring-catch. Into this pulley is fastened a strong catgut cord or linen twine, which runs down the splint and is attached by a loop to the upper hook on the *retentive box.*

The retentive apparatus consists of a thin bar of steel, notched with teeth on one edge, and fastened at either end into a depression made in the splint, on which glides a metallic box, provided with a hook above and below, and having on its under surface a projection to catch into the teeth. It will be seen that this box glides readily upwards, but is prevented from slipping downwards by the catch.

To the lower hook of the box is fastened by a loop, a catgut string or strong linen cord, which, running down the splint and through it, over a roller, passes over another roller and is tied to the hook on the *foot block.*

The treatment of fractures of the thigh and leg by this apparatus does not differ essentially from that generally practised where the Desault splint is used. Counter-extension is effected by slipping the upper end of the splint into the pocket made in the combined pelvic belt and perineal band. The perineal strap is made after the plan now generally adopted in the New York Hospitals, by passing a strong tourniquet tape of the required length through a shorter piece of india-rubber tubing of suitable size, and, having left a slight excess of tape within the

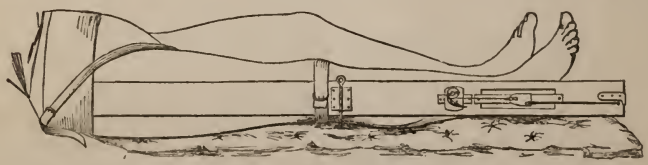


Fig. 3.

tube, fastening either end to the tape. Thus, moderate extension may be gained. It is well to stuff the tube with candlewick before fastening the ends.

For extension, a strip of canton flannel or other adhesive plaster, two inches in width, having been passed through the bracket in the foot block, is applied to the limb on either side in the direction of its long axis from a point below the fracture, forming a loop under the sole of the foot. The surgeon may add to its security by cross-pieces at intervals. The natural heat of the body is sufficient to produce adhesion, but if the surgeon choose he may more speedily effect the same end by artificial heat or the application of turpentine to the surface of the plaster. The plaster will be less liable to yield if allowed to set an hour or two before much extension is made. In all cases when extension by adhesive plaster is made use of, the natural yielding of the soft parts is such that the *loop should be left as short as possible.*

Fig. 1.—The cut represents the long splint inverted and bent at the knee, to show the foot block and the mechanical arrangement by which it may be folded when not in use, and securely straightened when in use.

Fig. 2.—Ratchet Pulley. Fig. 3.—Long Splint applied.

Co-aptation splints, if deemed necessary, having been secured about the point of fracture by the straps to be hereafter described, and the foot block, to prevent abrasion of the malleoli, having been slipped into the adhesive stirrup, the catgut string is tied to the hook and extension is gained by revolving the ratcheted pulley on the outside of the splint. This form of foot block differs from that generally in use. By passing the plaster between the bracket and board slitting of the plaster is avoided.

It will be readily seen, that if the ratchet pulley be now removed, extension will be maintained by the retentive-box. Not only does the surgeon have this extension ratchet for application in any number of cases, *but he also carries with him the key by which it is made in any individual case.* In his absence the patient will be unable to "let up" or relax extension.

Treatment of Fractures of the Arm and Forearm by Extension and Counter-Extension.—A strip of adhesive plaster is so placed on the arm, below the point of

Fig. 4.

fracture, as to form a loop below the arm for extension. Counter-extension is made from the axilla, by means of a

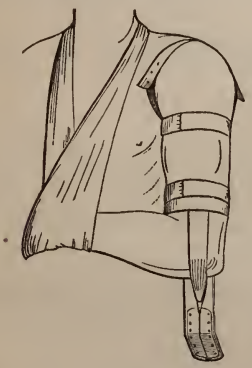


Fig. 5.

strap (corresponding with the perineal strap), if the splint be placed on the external or posterior aspects of the arm,

Fig. 4.—Arm Splint applied with axillary strap.
Fig. 5.—Arm Splint applied with axillary crutch.

or if the splint be placed on its inner aspect by the axillary crutch. The narrow splint, constructed similarly to the lower fragment of the thigh splint, is made fast by its upper extremity to the belt or crutch, as the case may be, while the catgut cord running over the roller in the shorter fragment, having been tied to the adhesive loop, extension is made as before.

To prevent lateral motion of the parts, and to obviate the tendency of the lower fractured fragment of the bone to tilt upwards, it will sometimes be found necessary to place at intervals cross adhesive strips around both arm and splint.

Fractures of the Forearm.—The adjoining cut perhaps illustrates definitely enough the form of splint and application of the same to fractures of the forearm. Counter-extension is made either by encircling the arm

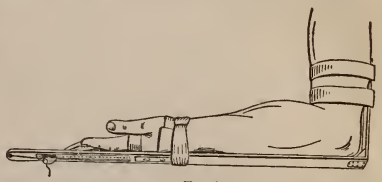


Fig. 6.

and splint, when the splint is placed on the inferior aspect of the forearm, with adhesive plaster, or by running a strip of the same from the point of fracture on the inner aspect of the forearm over the shorter fragment of the splint to a corresponding point on the outer aspect of the forearm. Extension is gained by so placing an adhesive plaster on the palmar and opposite surface of the forearm and hand as to form a loop above the fingers. To the loop the catgut is tied and extension is effected as before. In whatever position the surgeon may place the limb, whether looking directly upwards or directly backwards, or in the generally advised position between the two, the splint may be readily applied and secured.

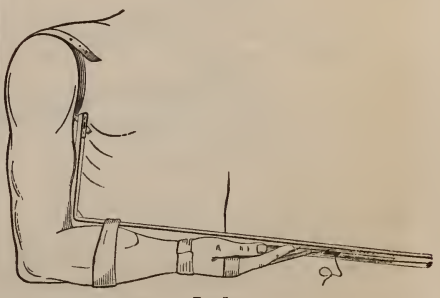


Fig. 7.

When, by reason of compound fracture, the splint is placed on the superior aspect of the forearm, the pressure of the shorter fragment on the arm forms the point of counter-extension. If it be found that the slight pressure on the veins thus occasioned be productive of pain or congestion in the wound, it may be deemed best to secure a point of counter-extension from the shoulder. Insert the pin of the crutch into the tube on the upper end of the splint, and having placed the pad against the shoulder, a firm point for counter-extension is obtained.

Fig. 6.—Forearm Splint with counter-extension from the arm.
Fig. 7.—Forearm Splint with counter-extension from the shoulder.

Ready Field Splints for Army Surgeons.—Dr. Vedder states that he is indebted to Foster Swift, M.D., of New York City, Surgeon 8th N. Y. S. M., for the following description of an extemporaneous fracture device that may prove valuable occasionally to other than military surgeons. Dr. Swift says:—"I enclose a succinct description of an extemporaneous splint which was more particularly adapted to the treatment of arm fractures from gunshot wounds, and which was especially serviceable in putting the patient in a condition to be transportable with comparative comfort.

Fig. 8.

"After the battle of Bull Run, on the 21st July last, we were left with four or five cases of fractured arms, with no appliances for their treatment, and with the prospect of their transportation over a rough road in rough wagons to Manassas, and from thence to Richmond. Without splints and without any light material to make them of, I am indebted to Dr. Hoges, of one of the Mississippi regiments in the rebel army, for the following simple contrivance, which afforded great relief to our wounded men in their jolting journey. Two strips of adhesive plaster were cut two feet in length and three inches in width, one of which was carried over the upper fragment to the point of fracture, leaving a loop above; the other was carried in a similar manner over the lower fragment forming a loop below. A piece of board about one foot longer than the fractured limb with a V-shaped piece removed from each end was then applied to the arm. The lower loop was tied by a bandage to the lower V, and the upper loop to the upper V. The fragments were thus separated, and the limb could be secured to the splint by a simple turn of the bandage, above and below the point of fracture, thus leaving the orifice of the entrance and exit of the ball open."

Not only upon the battle-field, but also in railroad accidents, is the surgeon often obliged to transport his patient to a suitable place for treatment. When he is unable to provide himself with boards, or is without the means of sawing out the V-shaped piece, he may extemporize a retentive splint from tree branches.

Bind together two straight branches of suitable size and length, so that a fork will be left on either end over which the bandage attached to the loops may be tied. In place of the upper adhesive loop the surgeon may use an axillary strap made of such material as may be at hand, and in place of the lower loop, he may substitute a handkerchief bandage. The necessary pads and bandages may be made from such material as is convenient. If one branch be *let into the other by a notch* before they are bound together, the splint will be firm enough to bear any pressure.

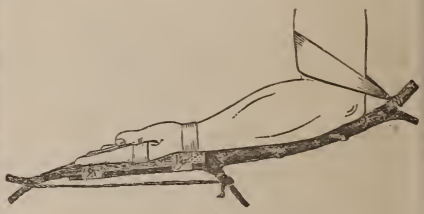


Fig. 9.

In fractures of the forearm the two branches must be so bound together that the fork at the elbow may be parallel with the long axis of the arm, and the fork at the opposite extremity parallel with the hand in a supine position. A short fork must be left in the middle of the rustic

Fig. 10.

splint to which the hand loop may be tied, after the manner described in the paper on extension.

In fractures of the leg and thigh, if no more available appliance is at hand, the field surgeon may construct a ready extension apparatus,* thus: apply an adhesive plaster above the point of fracture so as to form a short loop on the outside of the limb between the head of the bone and the crest of the ilium, and in the same manner form a loop below the point of fracture above the external malleolus. Place on the outside of the limb parallel with its long axis, two forked branches, hinged at the knee by a cord or strip of bandage, and, on the opposite side of the limb, place a long straight branch. If, now, the loops be tied to the forked ends and the *splint then straightened*, extension to the required length will be effected. To secure this extension bind the two hinged branches together. Let a bandage now be turned around the splints and leg. In place of the upper adhesive loop a perineal strap may be used, and in place of the lower loop, a handkerchief bandage. *In making the hinge at the knee, let both branches be deeply notched to hold the cord in place.*

Thus, with adhesive plaster, a few bandages, and a pocket knife, the field surgeon has always at hand means adequate to render a patient with a fractured limb comfortable during transportation to a general hospital.

Fig. 8.—Field Arm Splint.

* In two cases of morbus coxarius I have successfully made use of a simple wooden splint for extension, of which this is a modification.

Fig. 9.—Field Forearm Splint applied.
Fig. 10.—Field Extension Thigh Splint partially applied.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 21st day of April to the 28th day of April, 1862.

Deaths.—Men, 86; women, 89; boys, 108; girls, 94—total, 377. Adults, 175; children, 202; males, 194; females, 183; colored, 10. Infants under two years of age, 126. Children reported of native parents, 20; foreign, 160.

Among the causes of death we notice:—Apoplexy, 6; Infantile convulsions, 19; croup, 7; diphtheria, 4; scarlet fever, 26; typhus and typhoid fevers, 10; consumption, 77; small-pox, 12; dropsy of head, 12; infantile-marasmus, 21; diarrhœa and dysentery, 0; inflammation of brain, 6; of bowels, 14; of lungs, 24; bronchitis, 6; congestion of brain, 6; of lungs, 3; erysipelas, 0; whooping cough, 5; measles, 3. 182 deaths occurred from acute diseases, and 33 from violent causes. 252 were native, and 125 foreign; of whom 77 came from Ireland; 6 died in the Immigrant Institution, and 43 in the City Charities; of whom 11 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Barometer Building, No. 57 Essex street, New York.

April. 1862	Barometer. Mean height.	Barometer. Daily range.	Temperature. Mean	Temperature. Min.	Temperature. Max.	Difference of dry and wet bulb. Thrm. Mean	Difference of dry and wet bulb. Thrm. Max.	Wind.	Mean amount of cloud.	Humidity. Saturation, 1000
	In.	In.	°	°	°	°	°			
20th.	29.98	.10	44	40	48	5	9	N. to S.	3	677
21st.	29.97	.30	42	40	45	1	2.5	NE. to SE.	9.3	950
22d.	29.60	.40	50	42	60	3	5	NE. to SE.	7	800
23d.	29.80	.40	48	38	60	9	14	N.W.	1	500
24th.	30.04	.30	47	34	60	9	15	N.W.	.03	490
25th.	30.20	.18	44	36	55	7	13	NE. to SE.	1.7	594
26th.	30.24	.14	44	38	57	7	11	N.E. to S.	2	594

Remarks.—20th, Light rain A.M.; variable P.M.; clear, late. 21st, Light rain A.M.; cloudy day; N.E. storm during the night to 4 A.M. 22d, Variable, with warm showers. 23d, Variable evening. 25th, Variable morning. 26th, Fog morning. Wind for the last four days of the week mostly fresh.

MEDICAL DIARY OF THE WEEK.

Monday, May 5.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Thomas, half-past 1 P.M.
- Eye Infirmary, 12 M.

Tuesday, May 6.
- Bellevue Hospital, Dr. Loomis, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Wednesday, May 7.
- New York Hospital, Dr. Griscom, half-past 1 P.M.
- Bellevue Hospital, Dr. Sayre, Is. Hos., half-past 1 P.M.
- " Dr. Flint, Is. Hos., 3 P.M.
- Eye Infirmary, 12 M.
- New York Academy of Medicine, 8 P.M.

Thursday, May 8.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Barker, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Friday, May 9.
- Eye Infirmary, 12 M.
- Bellevue Hospital, Dr. McCready, half-past 1 P.M.

Saturday, May 10.
- New York Hospital, Dr. Griscom, half-past 1 P.M.
- Bellevue Hospital, Dr. Wood's Clinic, 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICES.

New York Academy of Medicine.—*On Wednesday Evening, May 7th,* Dr. Alonzo Clark *will present the subject of "Albuminuria, its Symptomatology, Pathology," etc., etc.*

New York County Medical Society.—*The Stated Monthly Meeting of this Society will be held at the College of Physicians and Surgeons, Fourth Avenue, cor. Twenty-third street, on Monday next, 5th inst., at 8 o'clock P.M. Subject for discussion, "Vaccination, its Protective Power," etc. The profession are respectfully invited to attend.*

John W. Shedden, Apothecary,

363 Bowery, cor. 4th St.

Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

P. W. Bedford,

PHARMACEUTIST,

removed to

745 *Sixth Avenue, near Forty-fourth Street,*

Opposite Sixth Avenue Railroad Depot.

Dr. Alfred C. Post has removed to 269 Madison Avenue, above 40th Street.

NOTICE OF REMOVAL.

DR. HANBURY SMITH

has removed his

LABORATORY AND SALESROOM TO

808 BROADWAY, Opposite Eleventh Street.

REMOVAL

WILLIAM WOOD,

(Late S. S. & W. Wood,)

MEDICAL BOOKSELLER,

has removed to

No. 61 Walker St., (Four doors West of Broadway.)

DR. NŒGGERATH

HAS REMOVED HIS OFFICE TO

125 WAVERLEY PLACE.

Douglass' Patent Artificial Leg—recommended by the most distinguished surgeons as differing from all others, possessing great strength, lightness, durability, and successful imitation of nature. Adapted to *every form of amputation.* Descriptive pamphlets free.

Manufactured only by the Inventor,

D. DE FORREST DOUGLASS, Springfield, Mass.

Wm. H. Davol, M.D., late Physician to L. I. College Hospital, Brooklyn, removed to St. Paul, Minn.

References.—C. L. Mitchell, M.D., T. L. Mason, M.D., Prof. E. N. Chapman, M.D., of Brooklyn; Prof. Austin Flint, M.D., Prof. B. F. Barker M.D., of New York.

Descriptive Circulars with Samples of Work will be sent mail free.

Having just completed the most successful season's business they have ever enjoyed—wherein they have demonstrated that, *for all kinds of work,* they have "THE SEWING MACHINE OF THE WORLD"—enter upon the New Year with still more important improvements, the latest being their

"NEW TAILORING MACHINE."

Having heretofore aimed almost wholly to supply a Family Machine, which should do all kinds of family sewing, and having succeeded, we now enter the market with a Manufacturing Machine, which, for elasticity and strength of stitch—for rapid movements—for simplicity and durability, defies competition. While adapted to make the HEAVY ARMY AND NAVY COATS, with linen thread, it can, by a slight change, be made to do the fine family sewing; thus combining in one machine adaptation to FINE FANCY SEWING and HEAVY MANUFACTURING. This can be best appreciated by those who have owned and operated machines. We do not ask or expect the public to be governed by our statements alone. *We court investigation,* and refer to the thousands who have our machines in successful operation.

FINKLE & LYON SEWING MACHINE CO.,

538 Broadway, New York.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians* (*principally country Physicians*) *Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bourbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA,

FOR NERVOUS AFFECTIONS.

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations*, *Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyosciamus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anæmia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.

By SAMUEL R. PERCY, M.D.,

PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE VI.—PART III.

RESINA PODOPHYLLI (PODOPHYLLIN).

Modus Operandi.—We find that podophyllin consists of two resins, one soluble in ether, the other in alcohol, the resin which is soluble in ether being in most instances the most active. Both of these resins are soluble in solutions of a caustic alkali, and when so given act rather more quickly as a purgative than when given in combination with an alkali. It will be remembered, that when applied to an ulcerated surface it acted equally well upon the bowels as when given by the mouth, and that it also acted upon the bowels when injected under the skin of a dog. In my lecture on iodine I proved to you that the various seeretions of the body had the power of decomposing, rendering colorless, and absorbing, the insoluble iodide of amidine; the same is the fact with this resinous substance, which, although perfectly insoluble in water and saline solutions, becomes soluble in the saliva, gastric fluid, pancreatic and biliary secretions. It is absorbed into the blood, then, whether given in an insoluble powder, or held in solution by an alkali. So far as my experience goes it acts with less irritation when given in solution in an alkali than when given uncombined with an alkali in either pill or powder; because in this way it is more quickly absorbed, flows freely over a larger surface, and thus causes less irritation of the mucous membrane. Most of the resinous cathartics act as drastic purgatives, and by their irritating action on the intestinal canal indirectly excite the liver, and stimulate it into activity, thus acting as cholagogues. The same result is produced in a very mild degree even in the process of digestion. But that this is not due merely to the irritation of the orifice of the hepatic duct, is proved by the dissimilarity of the operation by different materials that stimulate the duodenum in an equal manner. Again, we find that each particular medicine has its own peculiar operation, whether introduced directly into the circulation of the blood, or administered by the mouth. And we find with this agent that in whatever way administered it passes into the blood, is absorbed and carried through the system, producing its own peculiar action of exciting into activity the glandular system, and that by the augmented secretion of these glands it passes out of the blood, and removes from the system the effete matters secreted; thus doing good by removing not only from the bowels but from the glands the irritating materies morbi no longer needed in the system, in this manner purging the blood. It is claimed for this medicine that it has an action on the liver similar to mercury, and owing to this asserted similarity it has been called vegetable mercury. How are we to arrive at the facts in this case? I am not aware that any chemical tests could be applied to ascertain the presence of so small an amount of this agent in the liver, for it will be remembered that half a grain of the pure ethereal resin is a full dose. We cannot, then, as Buckheim did with mercury, actually detect it in the liver of dogs to which it was given. But we can (and have by many careful experiments) ascertain that bile exists in very large quantities in the alvine discharges of men and animals to whom the resin has been given; and reasoning from good analogy, we can assert that it has an active agency upon the liver, because diseases of the liver and bilious derangements are cured by its operation.

Again, it is claimed for this medicine that it has a powerful *alterative* action. Using this word in its fullest sense, we cannot but acknowledge that it produces the effects claimed for it, for as the term is used it signifies medicines which *alter* for the better the state of the system. From the action that the resin exerts upon the blood we have seen that it stimulates the function and increases the secretion of various glands, in this way *altering* the composition of the blood itself, and becoming a blood medicine by the change it produces in that fluid by its true eliminative action.

It is asserted by one practitioner that he has cured one hundred and twenty cases of syphilis with podophyllin, and that it acts as well as mercury, without any of its injurious effects. It is undoubtedly obvious to many observers that there is a great decrease in the cases of syphilis of the true Hunterian character, and that a great majority that now exist are readily cured without the use of mercury by good local and general treatment. Of such as these were no doubt the cases here spoken of. Let those cavil who will, but it is an indisputable fact that syphilis is of a milder character here than it was twenty five years ago; and the great majority of cases can be cured without any mercury, and podophyllin in mild cases of soft chancre would be better than most other remedies.

Of its sialagogue action we have spoken in another place.

It is to be regretted that so few physiological and chemical experiments have been performed with this medicine, for without them we are to a great extent ignorant of its true modus operandi. I have before promised you that with Dr. Elsberg's assistance I will at our earliest convenience give to the public a work on New Remedies and their Therapeutical Application. Before that work is published I will endeavor to institute a series of experiments, so that we may be able to give a more full and ample account than I can now do, and with this explanation you will excuse me for leaving unsaid many things regarding it that you would otherwise have expected of me.

Doses, and Modes of Administration.—As the podophyllin made by different manufacturers differs in its composition, the amount required for a dose will vary according to the sample that is taken. Again, it will vary in its action; for when the pure resin is taken alone it acts more quickly, and produces more pain than when given in combination with some carminative or sedative. Of the samples that are in the market the full purgative dose for an adult will vary from one to three grains. The amount necessary to be taken will vary of course with the effects required to be produced. If an ordinary dose of "bilious medicine" is required for an adult man, a very good pill will be:—Podophyllin, two grains; capsicum, two grains; both finely powdered and well rubbed together, and made into a mass with a small amount of honey. This pill may be taken at bedtime, and will generally operate in the morning without causing much uneasiness. If a dose is required for a delicate female a pill may be made in the following manner:—Podophyllin, dried carbonate of soda, each one grain; extract of hyoscyamus, two grains. This will be moist enough to work into a pill, and may be taken at bedtime. It is difficult to get children to swallow pills. I therefore usually prepare a syrup in this manner:—Podophyllin, four grains; liquor potassæ, sixteen minims; syrup of ginger, one fluid ounce. The podophyllin in fine powder is rubbed in a warm porcelain mortar with liquor potassæ, and as saponification takes place the syrup is gradually added. For a child from six to ten years old, the dose will be a teaspoonful. There is one great objection to the ordinary podophyllin pills that are put up. They become so hard, and are so slowly dissolved in the stomach and intestines, that they frequently pass but little acted upon. If pills are kept made up, as large a quantity of honey as possible should be the substance with which they are combined; in the warmth and moisture of the stomach they are quickly dissolved. Whether the podophyllin is given in powder or pill it should always be brought to the finest possible

powder, for in this state it produces less irritation and pain than in a coarsely powdered state, and this holds good whether it acts first upon the stomach or upon the lower portion of the small intestines. I administered to a man about two hours after a meal two grains of coarsely powdered commercial podophyllin in a gelatine capsule that had been frequently dipped into a solution of mastich in chloroform. No effect was felt for three and a half hours; it then produced severe griping pains in the lower portion of the small intestines, and a free bilious evacuation, as though it had acted upon the stomach and duodenum. The same dose, administered in the same manner in two gelatine capsules coated in the same way, but the podophyllin first made into a soap with caustic alkali, did not produce the same tormina. Both of these methods of administration were tried several times, with the results above mentioned. Capsules coated in this way are not dissolved in the stomach, and freely pass into the small intestines, until the resinous substance is dissolved by the bile and pancreatic secretion; the same is no doubt frequently the case with dry podophyllin pills, and it is also the case with podophyllin in powder, if administered in large quantities.

The most pleasant way of taking this medicine is in the double gelatine capsules. In this way one or more capsules can be filled with the podophyllin made into soap, and if necessary mixed with a carminative or stimulant.

If it is administered for diseases of the kidneys I think it best to be given in a state of fine powder, and not in solution or combination with any stimulant; it in this manner acts more upon the bowels, and they relieve the kidneys.

When given for its special action to increase the secretion from the liver, in chronic disorders of that organ, a very small dose, frequently repeated, will be found of more service than larger doses at longer intervals; for if a large dose is taken it cannot be repeated in less than three or four days without acting too freely on the bowels; whereas, if a small dose is taken it may be repeated every few hours, and thus keep up its continued mild action. I have a case of chronic hepatitis I am now treating, which has improved in a most satisfactory manner upon the use of cold infusion of the bitter roots and small doses of podophyllin alone. The pills I have given in this instance are thus prepared:—Podophyllin 3 grains; dried carbonate of soda, 20 grains; pow'd calumba root, 30 grains; honey, sufficient to make into a mass, to be divided into 24 pills. Each of these pills contains one-eighth of a grain of podophyllin, which the powdered calumba keeps in a fine state of division. Of these, one pill is taken every four hours, and they produce an easy evacuation about every twelve hours.

I see it stated in several books, that in case an overdose of podophyllin has been taken, lactic acid in the shape of sour milk is the proper antidote. If it was immediately discovered that an overdose had been taken this would be a very good remedy, because it would to a great extent prevent the absorption of the resinous matter, and cause it to spread itself over the coagulated casein, and thus render it easy of evacuation by an irritant emetic of sulphate of zinc or alum. But if an overdose of podophyllin had been taken long enough to be absorbed, I think that a person who would then administer sour milk would be guilty of gross malpractice, for he would be adding to the violence of the pain and the inflammation of the mucous membrane by giving an acid. The proper treatment in such cases would be full and prompt doses of opium. In the griping pains which are sometimes caused by medicinal doses of podophyllin, warm aniseed or ginger tea generally gives relief; but sometimes a dose of paregoric is required.

There are some persons who cannot bear the use of podophyllin without combining it with an opiate; it then acts kindly and well.

In chronic diseases of the liver I have found the combination of podophyllin and sub-nitrate of bismuth of great service. Podophyllin, in poisonous doses, must cause violent inflammation of the stomach and intestines, especially of the mucous surface. I know of no antidote, but I should think, in addition to the ordinary treatment for gastro-enteritis, free use of the chalk mixture would be of service.

Many writers compare the action of podophyllin to that of jalap, others again think that it is more like scammony, and some compare its action with colocynth; but we have seen that, however much it may resemble these remedies in some respects, it has an action of its own differing from either of them. Of its true physiological and therapeutic action I have no doubt we have much yet to learn, and it will be my endeavor to present you more details of its action in the work I have promised you.

Original Communications.

ON THE PROXIMATE CAUSE OF DELIRIUM TREMENS,

WITH ESPECIAL REFERENCE TO THE TREATMENT OF THE DISEASE.

By M. GONZALEZ ECHEVERRIA, M.D.

The frequent occurrence of delirium tremens does not seem to have done much towards establishing proper views of its character. The symptoms are, for the most part, the only guides for treatment; the pathological anatomy of the disease being not understood as it should be. Authoritics concur in admitting that, when it supervenes upon a debaueh, it is due to cerebral excitation or hyperæmia, and to ccrebral exhaustion or anæmia, when it occurs upon the withdrawal of the alcoholic stimulus, in those persons accustomed to indulge freely in drinking. This latter statement is, indeed, utterly opposed to what we learn from a close investigation of the appearance of the brain; for cerebral hyperæmia is the proximate cause of delirium tremens in the first as well as in the second case, in which it happens in this wise:—The increased activity of circulation from constant alcoholic stimulus gives rise to a lengthening and dilatation of the cerebral blood-vessels. Now, as soon as the withdrawal of the stimulus diminishes the force of circulation, a stasis of blood takes place, and we have cerebral hyperæmia, the true source of the mental disturbance. Morcover, we shall see that by a reference to the symptoms which present themselves, we are enabled to suspect this very nature of the changes undergone by the brain tissue. The attentive examination of an intemperate man at once shows that, besides his peculiar stammering, there is a manifest tremor; he may be able to control his movements, but never his constant shaking.* These phenomena, even slight, afford undoubted evidences of the congestive state developed in the brain. This disposition to inflammatory congestion increasing, we find that the symptoms of delirium tremens become so identical with those of peri-encephalitis, that we are unable to distinguish the one disease from the other. The only difference I have observed, however, between them, is a fatty degeneration of the brain usually present after repeated attacks of delirium tremens, but which is not noticed by Calmeil in any of the numerous cases of peri-encephalitis reported in his admirable work on *Inflammatory Diseases of the Brain.*

While on this subject it is important to add that, whatever its form, delirium is always caused by cerebral hyperæmia. This statement is at variance with the generally received opinion which considers some of the cases as the result of anæmia of the brain. We have already, we hope, satisfactorily explained the cause of hyperæmia in delirium tremens following upon withdrawal of the alcoholic stimulus, and it is easy to see why such a relation of cause to

* Tremor is a symptom most constantly associated with a sub-inflammatory chronic condition of the nervous centres; therefore, it usually attends softening of the brain, paralysis from hæmorrhage, chronic meningitis, induration of the nervous centres, the result of exudations produced among the elements of the organ, and all slow intoxications attended with cerebral congestions, such, for instance, as those from opium, cannabis indica, etc., etc.

effect should always exist.* But it may be urged that debilitating conditions are usually attended with that symptom. It must, nevertheless, be remembered, that it is a law of pathology that deficient nutrition is the ordinary source of sudden local congestions, and hence we find that delirium often is a relapsing symptom in the convalescence of protracted fevers. Nothing is more common than cerebral congestion with anæmia, chlorosis, or with syphilitic, rheumatic, cancerous, or any other cachexia. Yet, it might be argued again, that, under the latter circumstances, delirium is the effect of a cerebral tumor. It must, however, be borne in mind, that a tumor interfering with the brain does not produce delirium, unless congestion or inflammation be more or less extensively developed in the cerebral tissue connected with the original disease. Even in atrophy of the brain, commonly attended with chronic delirium or mania, the hyperæmic state of the brain is evident in the dilatation and lengthening of its blood-vessels. Besides all these clinical facts, the researches of Kussmaul and Tenner confirm, "that anæmia of those parts of the brain situated before the crura cerebri, produces unconsciousness, insensibility, and paralysis in human beings; if spasms occur with these symptoms, some excitable parts behind the thalami optici must have likewise undergone some change."

The forms of delirium tremens which are fatal after the first attacks, are rare, but repeated seizures of the disease become a powerful exciting cause of a secondary diseased state, which is incurable. The cases of dementia and general paralysis, following chronic delirium tremens, are indeed numerous. We are all aware that intemperance is a main cause of insanity; and although all oft repeated attacks of delirium tremens do not necessarily bring on dementia and progressive paralysis, yet they fiually have a fatal issue exhibiting the symptoms and the post-mortem characters of peri-encephalitis.

In simple cases the lesion does not go beyond a congestion, which may, however, induce an acute inflammation in the brain. After repeated attacks, that congestion gives place to stasis of blood, and hence the exudations inpairing the structure of the organ, as also originating a decided subacute inflammatory condition, which brings on at last acute peri-encephalitis, or progressive paralysis and dementia. Such is the ordinary issue of delirium tremens; and these facts, which are established here as a deduction of pathological researches, were already foreseen by Calmeil. He suspected that repeated attacks of delirium tremens might cause, after some days, either inflammatory congestion, or congestion with granular degeneration of the encephalic tissues. The attentive consideration of several cases of acute diffuse peri-encephalitis, superveuing upon alcoholic intoxication, led him to this hypothesis, now sustained by post-mortem examinations.

I have, on different occasions, studied the condition of the brain in delirium tremens, and found it very much resembling that of peri-encephalitis. I will describe it here, as it existed in the case of a woman, a patient of Dr. T. G. Thomas in Bellevue Hospital, who died on the 30th of last December. She died with symptoms of general paralysis, and it was ascertained that she was at first taken sick with delirium tremens. The case being considered one of cerebritis, most likely brought on by alcoholic intoxication, by the request of Dr. Thomas, I examined the whole encephalon of this patient, about twenty-four hours after death. The membranes were markedly congested; the arachuoides, increased in vascularity and thickened, could be detached without tearing from the brain, both being firmly united through fine capillary vessels. On detaching the membranes, the cerebral tissue remained adherent to it, the brain presenting afterwards a rugous surface. There were patches of solid pus in some places of the arachnoid cavity.† The convolutions were strongly marked and hardened. On slicing the brain the cortical substance was of a violet discoloration aud a general punctiform injection. In the optic thalami, the pons varolii, and the cerebellum, the discoloration was deeper, and the surface of the cut looked as if moist more than in any other place. The cerebro-spinal fluid was augmented in the ventricles, and of a reddish tint; the choroid plexuses were much congested, and covered with yellow granulations formed of pus. Examined with the microscope, the cortical substance was found increased in vascularity and in myelocites; the amorphous matter, very abundant, was mixed with granular corpuscles of exudation, and brilliant fatty granulations. Once the preparation treated with ether, these latter disappeared, or more properly, were united in large globules. The capillaries, varicose and engthened, had their coats charged with granular exudations of a fibrinous nature. The white substance presented a similar alteration, although in a less degree. The fatty degeneration seemed more advanced in the cortical substance of the anterior part of the cerebral hemispheres and in the cerebellum, than in any other. The cerebro-spinal fluid of the ventricles contained a great deal of granular cells, blood globules, and crystals of hæmatoidine.

I have recently observed the fatty degeneration of the brain remarkably advanced in a portion of the cerebral hemispheres and in its adjoining membranes, sent to me also by Dr. T. G. Thomas. The cortical and white substances had a light discoloration, and were harder than normal. The membranes were intimately united to the cerebral tissue by capillary vessels penetrating into it. Under the microscope both the cortical and white substances appeared markedly granular. There were no granular cells, but the capillary vessels, irregularly distended, were quite masked by granular exudations. Most of the granular elements were of a decidedly fatty nature. This change of the cerebral tissue was besides appreciated by Dr. Thomas, who informed me that the patient died of delirium tremens at the Bellevne Hospital.

Comparing the above changes of the brain with those it undergoes in peri-encephalitis, we will find the same lengthening and dilatation of the capillary vessels, the same abundance of granular amorphous matter and granular cells, which, together with the thickening and adherence of the membranes, characterize the latter disease; the fatty substitution being, therefore, the only peculiarity possessed by delirium tremens. It seems that the alcoholic intoxication induces that morbid alteration in the organs, as the coincidence of chronic alcoholismus and fatty degeneration in the abdominal and thoracic viscera has been also pointed out. We are not able to state precisely the period of delirium tremens in which this alteration in the brain commences, but it shows itself at first in the anterior part of the cerebral hemispheres, in the optic thalami, and in the cerebellum. I have observed it twice mostly localized in these two latter organs; in one case in which the disease ended with violent convulsions, of real epileptic nature, the fatty degeneration was only found in the oblong medulla and the cerebellum. It is when the disease has become chronic, and is of a low character, and when the patient sinks into a prolonged state of coma, that we detect an advanced fatty degeneration in the encephalon co-existing with a like change in other viscera.

It will be readily admitted, that it is not a little important for the treatment of delirium tremens to have a proper knowledge of its proximate cause. The condition of the brain, however, is seldom uncomplicated with some derangement in the digestive organs, just as we rarely will observe acute delirium unaccompanied with some other inflammatory condition in the thoracic or abdominal viscera. Nevertheless, this pathological state of the other viscera is one of the epiphenomena in delirium tremens, and tends to modify the general treatment in no small degree. Hence we see that often emetics and cathartics fail to act as specifics for delirium tremens. There is no doubt, however, that the exhibition of emetics may afford relief in violent

* It is unnecessary to state that cerebral exhaustion necessarily involves a deficient supply of blood in the brain, since all the organic functions are under the immediate dependence of nutrition, which only regulates the properties of the nervous system.

† The pus in the arachnoid cavities, the choroid, and the iris, is always solid.

cases of delirium tremens, as they do in other apoplectic conditions of the brain, but they are far from being specific agents. It is unnecessary to speak of antiphlogistics; their danger is sufficiently obvious, and they prove highly pernicious, if there are no evident symptoms of acute peri-encephalitis. Nor are the claims of narcotics upon our confidence, and the reputation they usually enjoy, more trustworthy. Opium, which is the most praised, administered in severe attacks, does not quiet the patient, unless its dose be very large, and frequently the rest it produces is then followed by coma, the precursor of death. Neither does its free exhibition bring any positive relief during the period of excitation in simple cases of delirium tremens, for it generally happens that the patient passes from the alcoholic intoxication into that by opium, which may also prove fatal. The property opium has of congesting the nervous centres could not make us expect any better effects; there is, however, a time in delirium tremens in which opium certainly has a marked benefit, as a stimulant to sustain the patient when the disease has exhausted itself. Throughout the other periods that remedy has very uncertain if not unfavorable effects. Belladonna, ergot, digitalis, and other direct sedatives of the circulation may be more effectual than opium to forestall the cerebral congestion; as to ergot, it has been often used by Dr. O. H. Smith, who looks upon it *almost as a specific for mania à potu*. To pretend, nevertheless, that delirium tremens can yield in all the cases to an invariable treatment, or that a single remedy, such as opium, ipecac, ergot, etc., etc., must be exclusively used in them, is surely an error. Whatever be the beneficial results each of these agents might have in certain cases, they indeed do great mischief if administered in a loose and indefinite manner. The opposite properties of these numerous specifics would of themselves be enough to create distrust in their absolute efficacy, if a more powerful evidence was not besides afforded in the character of the disease itself. Unprejudiced experience proves that in the vast majority of uncomplicated cases the expectant treatment is the most successful and the only rational one. It is then essential to avoid restraint as much as possible; the use of the strait-jacket always increases the restlessness of the patient, from the efforts he makes to free himself from it. On the other hand, uncontrolled exertion of movements in a cool and well ventilated room, constantly has a beneficial result; and joined with the exhibition of acidulated effervescing draughts with ammoniæ sesquicarb. gr. x. to xviij., to calm the irritable stomach, speedily improves the condition of the patient. The treatment, so directed, does not last longer than any other method. Of course we need not state that emetic, purgative, and the antiphlogistic means should be employed when we have to contend with an inflammatory or an abdominal form of the disease. In repeated attacks, when delirium tremens freely assumes the characters of peri-encephalitis, the treatment must be energetic. The restoration to health is very rare, and even then is simply temporary, because the brain is deeply injured. Under these circumstances the antiphlogistic treatment is of advantage, as also cold applications to the head, which repeatedly used are followed with marked benefit, especially if resorted to after local bleeding by leeches at the back of the ears. If any inflammatory condition exists besides in the thoracic or abdominal organs, it deserves early and close attention; the depletive and purgative system must be, however, managed with great caution, and never carried on too long, as they may prove highly exhausting. Once the source of inflammation removed attention should be paid to diet, in order to improve the altered condition of the nervous centres. But, as already stated, it is not frequent to meet with chronic cases of delirium tremens completely recovering; generally they are succeeded by dementia and progressive general paralysis, and not seldom by epileptic fits.

The free indulgence in spirits may be a source of other disturbances in the nervous system, aside from those which give rise to attacks of delirium tremens. Intemperance has an important share in the aetiology of chronic inflammatory diseases of the brain, and in the so-called white softening of the nervous system. It may, besides, produce other phenomena resembling those in shaking palsy, such as a general tremor with thickness in the speech, headache, weakness in the limbs, and disturbances in the digestive functions. This train of symptoms may present relapsing exacerbations, most likely induced by subacute inflammatory congestion of the brain, and which are precursors of progressive paralysis and frequently of epileptic fits, having a dreadful form. The fatty degeneration which is observed upon chronic cases of delirium tremens, and the well known advantages of the iodide of potassium in white softening of the cord, likewise due to a fatty degeneration of the organ, suggested to me the idea of trying that remedy in order to forestall the effects of the above morbid condition. I have employed the iodide of potassium in the two cases recorded further on. Although in one of them the improvement was temporary, it is, however, evident that the remedy had control upon the disease. I will not draw any general deduction from those cases, neither will I pretend to explain the manner in which iodide of potassium acts under these special circumstances. Whether it determines the resorption of the fatty elements occasioning a new development of normal ones, or whether it has any other influence, it is a question which yet remains to be solved.

Case I.—R. F., æt. 49, applied to me the 18th of June last. He is a mechanical engineer, a tall stout man, of dark complexion and very active in his habits. For the last eight years he has lived in the West Indies, and indulged himself too freely in beer and spirits. He had twice gonorrhœa before being married, but never had syphilis; is the father of three children, and his wife has never miscarried. He had been subject for the last two years to constant headache, with nausea almost every morning, and obstinate constipation. To avoid these symptoms he had taken repeatedly all kinds of purgatives, and lastly some doses of wine of ipecac. Since last December he suffered from formication and weakness in the limbs, and from more violent headache. About the end of April, on his journey to this country, he drank very freely, and the day after his arrival in this city he became feverish, very restless, and a little delirious. These symptoms subsided with a purgative treatment and tepid baths; but ever since he was very excitable, sleepless, and felt at times a tremor in his limbs and difficulty in the speech. On examining, I found that the limbs were not wasted, their temperature was normal; all the movements were perfectly executed, but he could not grasp strongly with the left hand, nor stand steady on the left leg. If the eyes were closed while standing, he seemed to lose at once his equilibrium and was all the time unsteady. There was some degree of anæsthesia in the legs; their reflex movements, however, seemed increased. The left pupil was more dilated than the right, but sight was unimpaired. The speech was thick and the intellectual faculties were dull. The tongue coated and the appetite lost. The pulse was rather frequent and soft (88). No morbid sound in the heart; its beating was, nevertheless, weak and scarcely perceptible to the hand. The patient had never had rheumatism nor any other disease, except the yellow fever. I tried his urine the 19th of June; it was acid, pale, and contained a small quantity of albumen.

I advised the patient to abstain from beer, and only drink some dry wine with his meals, to regulate his diet, and to take gr. v. of iodide of potassium in half an ounce of inf. calumbæ, thrice a day, half an hour before meals. He was likewise directed to drink iced-lemonade in the daytime, and to take every other day a tepid bath with four ounces carb. potassæ, in order to increase the functions of the skin. In two months the patient was so much improved with this treatment that he thought himself cured; I advised him, however, to pursue this plan for a longer period, and not to drink again to excess. The 23d of September last the improvement was still maintained, but having returned to Cuba and resumed there his irregular habits, I have been informed that he had lately a sudden epileptic fit which has

been followed with decided symptoms of general paralysis and furious mania.

Case II.—The 26th of last August, I was called to attend a woman, æt. 38, native of Ireland. She was married; and two months previous to the above date, was delivered of a dead child eight months old, and flowed then profusely for a few days. She has been three other times pregnant, always miscarrying before the term of her gestation. She never had syphilitic disease, but stated that her husband had been troubled with *secret diseases*, which had made her very unhappy. Grieved from this cause, she had, for the last two years, addicted herself to the habit of drinking brandy and beer. A month before she suddenly became insensible and much convulsed, but did not bite her tongue; she was then for several hours drowsy, and ever since has had headache, with giddiness and weakness, tremor, and also numbness in the lower limbs. Her menstruation had not yet been re-established, and there were present leucorrhœa and pain in the loins. Three days before, during the evening, she was taken with another attack of convulsion, followed by slight delirium, which lasted twelve hours; the following day she was restless, and whenever she was raised vomiting supervened. The day I saw her she was better, but complained of violent headache, was still drowsy, and though at times delirious was, nevertheless, perfectly conscious. The skin was hot and moist, especially in the forehead: the pulse frequent and soft (105); respiration about 30; pupils contracted; tongue coated with a whitish fur; there was no vomiting, and constipation had existed for these four last days. The power and sensibility of the limbs seemed impaired, the left arm was weaker than the right, as she could not grasp with the left hand so well as with the right. None of the limbs were wasted, and they exhibited a constant slight tremor. The speech was thick, and the patient was slow in her answers. The neck of the uterus, enlarged and very sensitive, was the seat of an ulcer bleeding at the slightest touch.

I looked upon all these symptoms as the result of a subacute inflammatory congestion of the brain, induced by the abuse of alcoholics, and most likely seated in the vicinity of the oblong medulla, on account of the convulsive character of the disease. A purgative with the citrate of magnesia was at once prescribed; as also constant applications of ice to the head, and warm bottles to the feet. Iced lemonade to drink was given after the bowels had been relieved. The purgative acted freely, and the condition of the patient was much improved in the evening—the pulse came down to 86, and the skin was pretty nearly natural. I put the patient then on the iodide of potassium, five grains in half an ounce of decoction of bark every four hours. She was directed the day after to take some beef-tea, and a table-spoonful of whiskey three times a day; and although her condition continued to be better, it was not until the third week from the beginning of the treatment that the symptoms in the limbs decidedly began to yield. Menstruation appeared on the second month. While the above remedies were employed, the uterine ulcer was also treated with local applications of perchloride of iron and the nitrate of silver, alternately employed once a week, together with injections of fresh water morning and evening. The use of iodide of potassium gr. v. thrice a day, was persevered in for six months, the patient had left her intemperate habits, and as she had not been troubled up to this date with any other nervous disturbances, it was fair to suppose that the iodide of potassium stopped the morbid change which was very likely undergone by the nervous centres.

This case is also interesting on account of the influence which syphilis in the husband had to produce the repeated miscarriages. I have not been able to ascertain if in any of the different times the fœtus was born with external evidences of syphilis; and I think that the mother was not infected with it, because she did not present any of the secondary or tertiary symptoms of the disease. It is otherwise certain that syphilis becomes the source of nervous disturbances which may be mistaken for those brought on by the abuse of alcoholics. The distinction between them may be, however, easily made. It is important to bear in mind the age of the patient, for cerebro-syphilitic diseases frequently occur at an earlier period of life than those due to any other causes. The nervous disturbances, and secondary or tertiary signs of syphilis, always accompany each other; besides, and this is a very essential character, with progressive syphilitic paralysis there is usually some impairment in the functions of the muscles of the eye, or of the eye itself (sclero-choroiditis, œdema of the retina, atrophy of the papilla, etc.), whereas, in paralysis from insanity, or chronic alcoholismus, the functions of the eye are seldom involved, those of the tongue being mostly affected. Another difference is likewise observed in the characters of the headache: this symptom in both diseases may become more intense during the night, but with syphilis almost always it happens that the pain has a fixed and constant position, commonly in the forehead; whilst in the other cases it is diffuse, and does not exhibit so constantly the nocturnal exacerbation, nor the extreme violence of syphilitic headache, besides accompanied with pain in the bones, vertigo, affections in the throat, and generally incomplete paralysis.

REMARKS UPON DIPHTHERIA.

By EZRA M. HUNT, M.D.,
of new jersey.

(*Continued from page* 245.)

In the internal local treatment the probang is to be abhorred. If, as in this case, you see the exudation early enough circumscribe it with a strong solution of nitras argenti, applied by means of a large hair pencil, such as you may get at a depot of artists' materials or of some druggists. We doubt whether this caustic is of any value operating only upon or through the exuded membrane. The best gargle we are acquainted with is one made of salt, vinegar, molasses, Cayenne pepper, and water, in proportion about as follows:—Chlorid. sodii ʒj.; aceti acidi diluti ʒj.; treacle ʒij.; pulv. capsici ℈j.; aquæ puræ, q. s. To be used frequently, but with out straining the throat by prolonged use. A stimulating gargle like this we have found of great value in the anginose variety of scarlatina, and it is equally serviceable here, as there is no tendency to dynamic inflammatory action, but even the inflammatory tendency is typhoid. Where there is marked fœtor which the internal medicines and this do not obviate, as rarely occurs, Labarraque's solution, chlorate of potash, or brewer's yeast, may be freely used. A saturated solution of tannin or alum is a favorite gargle with some. We deem these of little value except during the early formative stage of the membrane. Here, by its constriction, it may act mechanically to corrugate the throat and break up the attachment of the membrane, or as some think specifically as a preventive of exudation.

Externally counter-irritation is desirable, and here in the country a slice of well salted fat pork produces about as pleasantly and rapidly as is desirable a papular eruption all sufficient. Over enlarged glands we have, in common with others, used Lugol's solution, but in bad cases it scarcely acts rapidly enough to produce its specific effect. Such are the general and local plans of treatment which we believe to furnish the best hope of recovery. I formerly used the mineral acids quite freely, but in some cases they seemed to me to impair the tone and power of the digestive organs, and to prolong a subsequent anæmic condition. I have seldom found the murias tinctura ferri administered as above, and still more diluted if need be, to disagree. The well established value of the chlorate in stomatitis, ptyalism, and other forms of constitutional affections of an adynamic character with local manifestations, and the benefit of the muriate in erysipelas, scarlet fever, and such low grade inflammations, would lead us to anticipate some value from them in this kindred disease, and they do not dis-

appoint us in the only true test of treatment. Chemistry cannot explain it, for whether the chlorine acts as a disinfectant, or the chlorate of potash as a tonic (Tully and Percy, good authorities, deny it), we cannot determine, or whether the muriate is decomposed, and at once adds itself as an important constituent to the blood, we are not sure, but they *do* aid in the control or abatement of the disease. Nor is the opiate to be undervalued. There is astonishingly little tendency in this disease to death by *coma*, except where the swelling of the glands retards circulation, or where mechanical closure about the laryngeal region interferes with respiration. The ailment in its start has a prominent nervous element, and the *laudanum*, acting first as a stimulant as in hæmorrhage, then as a sedative and soothing an excited circulation, procuring sleep in the midst of restlessness, used judiciously and in early stages, is of no small service.

Those cases in which there is no very extensive deposit in the fauces, and yet in which the whole system seems prostrated, and the powers of digestion and assimilation greatly impaired, though not rapidly fatal, yet not unfrequently after three or four weeks wear out the life of the little sufferer, and for successful treatment require of the physician strict attention to all dietetic rules and laws of digestion as well as to the administration of medicines strictly so called. Milk, eggs, and the most easily assimilated food must be provided, care being taken to give the stomach proper intervals of rest; stimulants will need oftener to be used instead of food nutrients; vegetable bitters, such as wormwood, Huxham's tincture, etc., may avail where quinine will seem to disagree. Milder chalybeates, such as Blancard's pills, etc., may be required, and withal the best sanitary and hygienic measures combined. Bathing the surface with warm brandy and milk, cod-liver oil, or some other nutrient material, may enable the skin to help in the work of regeneration, and thus all reasonable means must be used to wear out the disease before it does the patient.

Of malignant diphtheria the following case is a type:—In a family in which a child had been several days sick of the second form, a little girl of eight summers complained one Sabbath afternoon of a little soreness of the throat. A casual examination in passing exhibited some diffused redness of the fauces, without any exudation whatever, but as the pulse was frequent, and nervous for fear of the disease, chlorate of potash was prescribed. On Monday morning the glands about the neck were enlarged, the tonsils swollen, and slight points and strings of exudation sprinkled all over one tonsil. Constitutional symptoms were intense, indicating the active use of remedies. Tuesday morning the throat was enormously swollen, deglutition difficult, pulse not rallied, the throat and palatine arch covered with exudation, extremities purple and cold; death master. The child lived until Thursday morning, all the time sensible, at intervals playing with its toys, but pulseless several hours before its death. I know no treatment for such a case except to call to our aid all the dynamics which our art can furnish; and though I have great faith in medical progress I expect not to see such an ailment manageable until malignant scarlatina, concrete variola, typhoid pneumonia, and the plague, become subject to the powers that be.

As to the importance of prophylactic means, and their availability, our confidence in them is continually increased. The first cases in a family are generally the most malignant; and where chloride of lime, tar simmered over a fire, and care used about the residence, and chlorate of potash, good food, abundance of salt, and placidity of mind are advised, the after cases seem quite manageable. It has never happened to me to lose any case occurring in a family after such a course had been fully initiated, and I believe it our duty in every case to enforce such a course.

In connexion with this disease, so far as hypothesis is concerned, it is proper to inquire whether the morbid poison of the disease, whatever it may be, does not operate by destroying or enfeebling the cohesive or solvent properties of the blood by depriving it of its salts, or in some way rendering them inert. "The use of the saline matter," says Carpenter, "is evidently in part to prevent decomposition in the circulating blood." It almost seems as if something the same process of separation takes place as when blood is drawn from the body, and as here certain salts retard the separation, so may not these remedies used act upon the circulating fluid of the system? Has any minute chemical examination of the blood been made in connexion with diphtheria in order to determine whether any change has taken place in the saline constituent? Does the swelling of the glands about the neck depend upon the absorption of the membrane found about the fauces? Some have advocated active interference with it on this ground, but it seems to us that, as in bilious and other fevers, such enlargement is not a result of absorption from the locality, but only an indication as to the fact of the lymphatic system being affected by the virulence of the poison.

As to the sequelæ of diphtheria, they furnish material for much remark, but as we have met with none of them save anæmia, not very persistent, and slight local paralysis about the voice organs, we shall leave these to be elaborated by those of larger experience in this direction.

THE POINTS OF ELECTION AND KIND OF OPERATION, FOR AMPUTATION OF THE LOWER EXTREMITIES.

WITH REFERENCE TO THE USE OF ARTIFICIAL LIMBS.

By DOUGLAS BLY, M.D.,

ROCHESTER, N.Y.

[From the Transactions of the Medical Society of the State of New York.]

POINTS OF ELECTION.

Since an early period in surgery, surgeons have recognised the importance of selecting such points for amputation of the lower extremities, as were best adapted to the application of artificial limbs. Many of the authors of works on surgery have given such points as were considered best adapted to the artificial limbs made at that time, but the great improvements which have been made in artificial limbs have materially changed the old points of election; therefore this subject demands the attention of surgeons generally.

In accordance with the high state of perfection now attained in the construction of artificial limbs, all amputations performed on the foot should be anterior to the insertion of the flexors of the foot. The operation known as "Chopart's," severs the flexors of the foot, and should *never* be performed under any circumstances whatever. The moment the flexors are severed, the extensors, having no antagonists, draw the heel upward, extend the foot on the leg, and cause the amputated surface to point almost directly downward. This deprives the patient of all power to use the remaining portion of the foot, and also renders him incapable of wearing a useful substitute. I am aware that, to obviate this difficulty, some surgeons have severed the tendo-achillis, but that has proved ineffectual; it is only a partial relief at best. Therefore amputation at this point renders the patient a hopeless cripple. The wound is slow to heal, *always tender*, often ulcerating, and the remaining portion of the foot is generally a curse to the patient as long as he lives, unless he submits to a secondary amputation.

It is but a short time since the Prof. of Surgery in the Geneva Medical College performed secondary amputation for such a patient. This patient has had the tendo-achillis cut twice, and then made an unsuccessful effort to wear a substitute constructed by a noted firm in New York city, but at last, to better his condition, was obliged to submit to re-amputation. (*See cut, Fig. 5, which represents a stump after "Chopart's operation."*)

Amputation through the ankle-joint by sawing through

the malleoli, known as "Syme's operation," is less objectionable; still, since the artificial leg has been brought to such perfection, there are reasons which weigh heavily against this operation. The ankle-joint in the artificial leg should correspond with the one of the natural leg, but cannot in this case, and be constructed after the most approved plan, on account of the length of the tibia and fibula.

The lower portions of the bones occupy space which is needed for the artificial joint. (See cuts, Figs. 1, 2, and 3.)

Fig. 1

Fig 6

Fig. 3.

For amputations below the knee, the cords C, Fig. 1, have to be shortened according to the length of the stump, until the springs, S, rest on the plane seen just above the ball B, and cannot conveniently be placed any lower. This illustrates the necessity of removing at least the ends of the tibia and fibula.

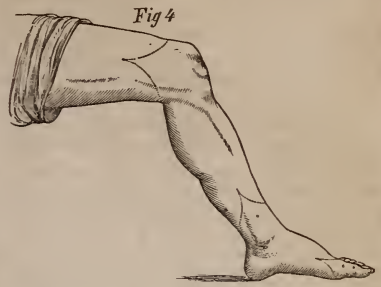
To get a good fit with an artificial limb, the stump should be conical, or at least it should not be larger at the end than it is higher up, as it renders a portion of the interior of the artificial too large, if made large enough to allow the bulbous extremity to pass through. (*See cut, Fig.* 6, *which represents a stump after "Syme's operation.*" Or if the leg is made to lace up, even then the ankle is necessarily large and clumsy.

It has been supposed that by this operation the patient would be able to take the most if not all his weight upon the end of the stump, but the cases which I have seen do not sustain the supposition. I have not seen one that could support the whole weight on the end of the stump, though a few could sustain some, not enough, however, to counterbalance the difference in the substitutes; while others could not bear any more than those who are amputated higher up. Therefore, when amputation becomes necessary which would sever the flexors of the foot, it should be performed a sufficient distance above the ankle-joint, to admit of an artificial substitute with an ankle-joint of the most perfect construction now attained.

The junction of the middle and lower third of the tibia is the lowest point at which amputation of the leg can be performed, and give sufficient room for the construction of a good, substantial, and graceful artificial limb, with an ankle-joint of the most recent improvement. *It also gives a stump of as much length as is of any service to the patient,* therefore the junction of the middle and lower third of the tibia should be the *first point of election* whenever the flexors of the foot cannot be saved. (*See point indicated on leg, cut Fig.* 4.)

An artificial leg, with lateral motion at the ankle-joint, will bear a stump of greater length, with comfort to the

Fig 4



patient, than one which has *no* lateral motion at the ankle. The testimony of those who have undergone re-amputation is, that with a very long stump and an artificial leg which had no lateral motion at the ankle, they suffered much more from the cramping and prying of the stump against the sides of the leg when they stepped on any uneven surface, than they did after re-amputation, with a stump of less length. The fact that the junction of the lower and middle thirds of the tibia gives a stump of as much length as is of any service to the patient, is important in this connexion. Then from this point the surgeon should not recede unless compelled by necessity. He should contest every inch until driven to the knee-joint. But he should never operate through the knee-joint, as nothing is gained by it, while much is lost, because the end of the femur will occupy space which is needed for the construction of an artificial knee-joint. True, an artificial joint has and can be made in this case, but not near as durable and comely as when the condyles of the femur are removed. The size of the condyles makes the end of the stump too large, and the same objection arises as in "Syme's operation."

If the femur is sawn through just above the condyles, the stump assumes a conical form, and the end of the bone no longer presents any obstacle to the construction of an artificial joint of the most modern improvement. Then for amputation of the thigh, the point of election is just above the condyles of the femur. From this point upward the surgeon should contest every inch with redoubled vigor. And the higher compelled to go, the greater the value of every item of femur saved.

KIND OF OPERATION.

In the use of artificial legs no weight is ever taken on the end of the stump; in fact, nothing is allowed to *touch* the end of the stump. But on the sides it is just the reverse. The artificial leg encases the stump, and more or less pressure is taken on all sides, particularly anteriorly and posteriorly. The stump is used as a lever to opcrate the artificial leg, and at every step there is considerable pressure on the anterior surface in carrying the leg forward, and then it is transferred to the posterior surface, just as the weight of the body is being carried forward on to the leg. Thus there is a pressure alternately on these two surfaces at every step. Besides this, with a leg in which there is no lateral motion at the ankle-joint, there is more or less cramping and prying of the stump against the sides of the artificial leg whenever the foot is placed on an inclined plane, or one side happens to be placed on any inequality, such as a stick or stone, or uneven ground of any kind. Now as the cicatrix is always tender and sensitive, it becomes necessary that, in amputating the lower extremities, the surgeon should choose the kind of operation which will best protect the stump on all sides, particularly the anterior and posterior.

The operation which fulfils these indications best, is the *double flap*, the flaps being antero-posterior.

If the flaps are taken from the antero-posterior surfaces, they lap over the end of the bone or bones, and protect the edges by means of sound healthy integuments in all cases, and in many by a cushion of muscle. This brings the cicatrix across the end of the stump, where nothing can touch or injure it when wearing an artificial leg. Very small portions of the cicatrix may in some cases pass up on the sides laterally, but not enough to be of any account in the use of an artificial leg with lateral motion at the ankle-joint, as that prevents all lateral cramping or prying against the sides of the stump.

The single flap operation is decidedly bad, because it often, if not always, brings the cicatrix just across the edge of the bone, where from its sensitiveness it seriously interferes with the use of an artificial leg.

The circular operation would, at first sight, appear to fulfil every indication, as it is alike on all sides, but unfortunately, instead of protecting all sides, it is really just the reverse. As soon as the weight of the body is placed upon the stump with a circular operation, the whole muscular covering, with the integument, glides upwards in a body; the end of the bone or bones protrudes beneath, covered by a thin cicatrix only, and instead of being protected on all sides are really protected on neither. Thus it is seen that the *antero-posterior flap operation* is THE operation, to be performed, whenever the surgeon has the privilege of choosing.

Reports of Hospitals.

NEW YORK EYE INFIRMARY.

STAPHYLOMA CORNEÆ,

WITH CASES AND REMARKS,

By HENRY D. NOYES, M.D., ASSISTANT SURGEON.

THE surgical proceedings in cases of staphyloma corneæ are three in number, namely, iridectomy, ablation of the staphyloma, and extirpation of the globe. I offer the following illustrations of two of these methods, with remarks upon the merits and applicability of the several operations. I may observe that there have been two cases of ablation of staphyloma under the care of Dr. John H. Hinton, of which one case never returned after the operation, and of the other, notes were not retained. One of them, at least, made a good, although slow recovery.

I.—*Staphyloma; Extirpation of Globe.*—Virginia C., æt. 11. For four years has had successive attacks of keratitis of the left eye, until by repeated ulceration the cornea, softened and thinned, yielded to the pressure of the ocular fluids. The staphyloma is globular in form, of a dead-white color, not so large as to prevent the complete closure of the lids. The conjunctiva and sclerotic are in a state of congestion, and the opposite eye is also reddened. Lachrymation from both eyes is constant. The staphyloma being total, the cornea in a state of chronic inflammation, and the protrusion being great, precluded the hope of reducing the staphyloma by iridectomy. The subacute inflammation of the conjunctiva of both eyes was a sufficient reason against the additional risk of inflammation, which would follow the ablation of the staphyloma. I therefore proceeded to extirpation of the globe. On the ninth day patient left the Infirmary, the healing of the tissues not being quite perfect, but she had been going about the wards for a week. The conjunctivitis of the other eye disappeared spontaneously; all that remained to require treatment was slight ophthalmia tarsi. At the end of a fortnight an artificial eye could be worn. I might multiply instances like the above, but they would have great uniformity of history and result.

II.—*Staphyloma Corneæ; Hernia Iridis; Iridectomy; Cure.*—Sailor, æt. 32. Eight years ago an injury of the right eye produced opacity of the cornea with anterior synechia of the iris. In January he came to the Infirmary having keratitis with hypopium. He was treated with tonics, solution of atropine gr. ij. ad aquam ʒj. freely employed, paracentesis practised several times, and he recovered. After a month a relapse took place, keratitis with hypopium, and also ulceration of the cornea. This attack was more distinctive than the preceding, the hypopium greater, and the ulceration penetrating to the deep layers of the cornea. The hypopium disappeared, but although the acute symptoms abated, congestion of the anterior ciliary vessels continued, and the cornea began to bulge forwards. This gradually increased, and at the apex of the prominence the iris began to appear in the form of a small black vesicle. The extrusion of the iris and staphyloma of the cornea increased in spite of atropine and paracentesis. I determined upon performing iridectomy. I excised a section of the upper part of the iris, through a wound a quarter of an inch long, made in the sclerotic one line from and parallel to the limbus corneæ. A little hæmorrhage took place into the anterior chamber. The operation slightly aggravated the previous sclerotic injection. The wound in healing continued prominent for several days. After forty-eight hours the prominence of the cornea had abated, the iris no longer protruded. Three weeks afterwards all hyperæmia has disappeared, the cornea is flatter than natural, no trace of hernia iridis is to be seen. Through the opening made in the iris, patient can discern large objects, the corneal opacity growing thinner.

III.—*Partial Staphyloma of Cornea; Iridectomy.*—I introduce another case, which did not occur in the Infirmary. A lady, living in Brooklyn, had a partial staphyloma of the upper and inner border of the left cornea. It had been of gradual growth for twenty years, and was the result of ulceration of the cornea in childhood. The prominence was densely white, acuminated, its base probably three-sixteenths of an inch in diameter. It arose close to the sclerotic border, while the rest of the cornea was transparent, the pupil circular and contractile. Minute vesicles, like sudamina, occasionally formed upon the apex of the staphyloma, and were the cause of considerable irritation. The staphyloma was increasing very gradually. Vision was such as to read No. 14 (Jaeger) or Paragon type. There was no general hyperæmia of sclerotic, while a few large vessels ran towards the staphyloma.

I suggested and performed iridectomy, doing it at the upper part of the iris, the wound being in the sclerotic one line from the corneal edge. The eye was closed with isinglass plaster, which was renewed on the second day, and finally removed on the fourth day. No pain, œdema of lids, nor inflammation followed the operation. There had been no bleeding into the anterior chamber. A week afterwards the eye was free of congestion, the staphyloma was evidently flatter than before. On the eleventh day the lady was able to come to my office, and the prominence of the staphyloma is gradually diminishing.

IV.—*Staphyloma of Cornea; Iridectomy; Suppuration of Globe; Extirpation.*—I present the following case, because it is instructive in several points, and showing what may complicate the operation.

Mary McG, æt. 17, for many months suffering from granular conjunctivitis with pannus of the corneæ, came to the Infirmary in February. After two months' treatment, consisting of general tonics, atropine in the eyes, and tr. iodine to the forehead, the acute symptoms of keratitis passed away. Photophobia, lachrymation, pain, congestion of the sclerotic disappeared, while the opacity of the cornea began to clear up. No nitrate of silver was employed, the corneal inflammation utterly forbidding, in my opinion, the employment of it or of any irritant. The left cornea was in a state of total staphyloma, the elevation not very large but deeply opaque, a ring of clearer substance remained at the extreme edge of the cornea.

For the sake of reducing the staphyloma, as well as to take advantage of the clear margin of cornea, I determined upon iridectomy. The section was made at the lowermost part of the globe, the point of the straight lance knife entering the sclera at one-eighth inch from the cornea, and pushed very obliquely through into the anterior chamber. The stimulation of ether, and the manipulation of the eye, induced extreme turgidity of the recently congested zone of vessels surrounding the cornea. Through these distended vessels the knife penetrated, and in consequence the bleeding was very free. It even required the liberal use of sponges. The anterior chamber, when I was at last able to use the forceps, and seize the iris, was full of blood. Bleeding was renewed upon cutting off the bit of iris, and continued some minutes. The eyelids were therefore left unstrapped. Severe inflammation followed, which in spite of leeches, and paracentesis, etc., etc., culminated in rupture of the cornea by suppuration of the globe. During the week while this process was going on, two smart hæmorrhages occurred from the interior of the eye.

The younger the child is the less likely is a happy termination of the case after the operation to be presumed. In a "Lettre des Internes à l'hôpital des Enfans à M. Bouvier," they recommend not to operate on children under two years of age, and on those from two to two and a half only with reluctance. The reports of cases of successful tracheotomy in children under two years are scarce, it is true, but Trousseau saved by the operation a child of thirteen months, still nursing. Scoutetten's famous case shows, at least, that a child of six weeks *may* be operated on with success if such an unusual event should ever present itself again. (It was Scoutetten's first operation, relating to his own child, but it is more than doubtful if the affection of the child was croup or rather laryngismus). The youngest child I operated on was twenty months, the youngest saved was one two years four months; I also saved one two years six months, both girls.

(To be Continued.)

SURGICAL SECTION.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, March 28, 1862.

DR. JAMES R. WOOD, CHAIRMAN.

(Reported by J. P. GARRISH, M.D., Secretary.)

TRACHEOTOMY IN CROUP.

DR. A. L. VOSS opened the discussion on the subject of tracheotomy in croup, remarking as follows:—In opening for discussion the subject of Trachetomy in Croup, I have to state that, having published more than two years ago a paper, entitled "A Historical and Critical Examination of the Operation of Tracheotomy in Croup, with a Report of fourteen cases" (*New York Journal of Medicine*, January 1860, pages 30–59.), I shall refer to the paper repeatedly. Doctor Francis Home of Edinburgh, published the first monograph on croup in 1765; his book contains, on the subject of the operation in question, the following words (page 59): "When the case is desperate, may we not try bronchotomy? I can see no weighty objection to that operation, as the membrane can be so casily got at, and is very loose. Many a more hazardous operation is daily performed. I would propose, however, that it should be first tried on a dead subject, that we may proceed with all manner of caution and assistance. But something ought to be tried in this dangerous situation." You see how early the operation, as a last resort, presented itself to the plain and simple reasoning mind. The earliest, although unsuccessfully performed operation of tracheotomy in croup, I am able to find, is by Duntze of Bremen, about 1790; the first case successfully operated upon is that by Thomas Chevalher of London, in 1814. But the more general introduction of the operation we owe to the labors of Bretonneau (his first success in 1825), and to his pupils and followers, Trousseau, Velpeau, and Guersant. I believe now that there are very few who object to the performance of the operation in croup in general, and the Academy of Medicine in Paris declared in the celebrated discussion upon this subject, and the "*Tubage*" in 1859, that tracheotomy is, in the actual state of science, the only remedy to resort to, if there is no more chance of relief by medicinal substances. From France the operation came in general use in Germany, then in England, and lastly here.

As causes for the want of success in the earlier cases of tracheotomy, we have to point out, first, the treatment before the operation, antiphlogistics, or at least weakening remedies, such as blisters, etc., used freely; second, the operation, if resorted to, was performed at the very last moment; third, the manner of operation, the instruments, and the after-treatment, were alike defective. At present these causes of failure being for the most part removed, the success in consequence is much greater.

Guersant operated twenty-three times before he could boast of a successful case, and he had but seventeen successful cases out of eighty-two operations. I have thought it would be interesting to make the following statement in reference to the number of operations performed by different French surgeons, and their results, as I have been able to gather them from the French literature upon the subject.

	No. of operations.	No. saved.		No. of operations.	No. saved.
Trousseau 1850–55 (private practice)	42	22	Favre	6	—
Gerdy	6	4	Auzias	24	1
Archambault	12	7	Robert	23	1
Gosselin	23	—	Nélaton	36	8
Brochin	3	—	Jobert de Lamballe	60	10
Follin	15	2	Lenoir	20	1
Brova	10	6	Desormeaux	11	2
Depaul	7	1	Monod	40	—
Richard	12	2	Thie ry	37	3
Guerin	12	1	Roser (Marburg)	42	19
Michon	20	2	Passavant (Frankfort)	9	5
Deljuise	12	—	Fock (Magieburg)	24	10
Langier	8	1	Bamm (Göttingen)	31	12
Huguier	8	—	Peinemann (ibid.)	8	5
Velpeau	13	4			
Jarjavay	12	—			

Of 131 operations performed by eight French physicians proper, 49 were successful; of 443 cases operated on in the Hôpital des Enfans trouvés from 1850 to July 1858, a period of eight and a half years, 100 were successful.

In regard to the number of operations performed in this city I have not at present the means of giving any reliable statistics. It is worthy of remark, that I have not yet heard of a successful operation in New York during the year 1859 (famous for diphtheria).

All these statistical data are, however, worth but little when we consider the great want of detail in the description of the symptoms of the malady. Real croup, I fear, is a disease of unfrequent occurrence, but much more fatal than usually believed. It is a specific disease (of zymotic character), sometimes local only, sometimes accompanied with general disturbance, sometimes sporadic, sometimes epidemic, and even contagious, wholly distinct from inflammation or catarrh.

The anatomical alteration pathognomic of croup is the false membrane, lining and blocking up a more or less considerable portion of the air-passages, which gives rise in turn to dyspnœa, asphyxia, and sopor. Now, when insufficient respiration is present with commencing asphyxia, and is not dependent on affections of the lungs, and is not relieved by emetics, or perhaps other medicines, I think the operation of tracheotomy should be performed without hesitation. Tracheotomy is indicated where stenosis of the larynx or trachea exists. There we ought to resort to tracheotomy, in order to give free access of air to the lungs. If these organs are sound, the operation is *cæteris paribus* imminently a life-saving operation. If the lungs or the general system are otherwise affected, we, by freeing the patient from the imminent danger of suffo-

cation gain time to treat the accompanying affections by the proper means. I will not speak of the danger of the operation as an additional complication to the already affected organ, as this subject is differently judged of by different authors. Tracheotomy stands, in this respect, on a level with other life-saving operations, herniotomy, ligature, cæsarean section, etc., and the same reasons sustaining such operations will be also applicable to tracheotomy. It ought to be remembered, that unrelieved stenosis of the larynx is absolutely fatal, even uncomplicated by other affections. As general diphtheritic intoxication or bronchitis, or bronchial croup, or pneumonia, or emphysema, are not affections absolutely fatal like stenosis of the larynx, in case the latter affection should be complicated with one of the former, the removal of the stenosis even by an operation would not only be justified but required, and it is obvious that the happy termination of the operation in complicated cases, or in very young children, is by far less frequent than in cases of no complication or in older children.

As a measure of humanity, and to remove a cause of offence to the remaining eye, I extirpated the suppurating eye. The operation was effected with great difficulty by reason of the free bleeding, of the adhesions of the globe to the orbital tissues, and of the partial collapse of the eye. I could not avoid snipping the softened sclerotic with the scissors, especially when attempting to clip the optic nerve.

I carefully dissected the eye. The cornea was opaque, softened, and ruptured; no trace of the lens; I presume it had been absorbed before patient came to the Infirmary. The vitreous infiltrated with inflammatory exudation. The iris and choroid so soft and congested that I could scarcely use forceps without tearing them. There was a clot of blood spread out between the sclerotic and choroid at the upper part of globe, and another clot between the same tunics near the place of iridectomy. The wound of the sclerotic made in the operation is five-sixteenths of an inch long, it opens into the anterior chamber exactly at the internal edge of the cornea; I found the section of iris had been removed entirely to its circumference, and that also the tips of the ciliary processes for a corresponding breadth had been torn off, or perhaps cut off. Microscopic examination was not made, the points of chief interest being surgical. After loss of the eye, œdema of the lids abated, and patient became quite comfortable.

(To be Continued.)

American Medical Times.

SATURDAY, MAY 10, 1862.

CLAIMS OF MECHANICAL SURGERY.

Surgery has not made more rapid advances in the conservation of limbs hitherto doomed to destruction, than has mechanical surgery in supplying the defective parts. It is quite impossible, nowadays, to determine what part of an individual is natural, and what artificial. Of ten men who walk the street each with an artificial leg, in nine we are more liable to fix the disability upon the natural than the artificial limb. The western bride who was thrown into convulsions on seeing her bridegroom suddenly deprived of an entire leg by a waggish friend, illustrates in one of a thousand ways the present perfection of the appliances of mechanical surgery. We now have artificial teeth which baffle even dentists to detect their genuineness; and artificial eyes which flash with intelligence, sparkle with merriment, and doubtless roll with the fine fancy of the poet. Even nasal appendages are now manufactured to order so as to imitate exactly the natural tint of that organ, or the more brilliant colors of the acne rosacea, not infrequent in the higher circles of society.

But mechanical surgery is only in its infancy; most of the improvements which we witness date back but a score and a half of years. The clumsy apologies for legs which fifteen years ago represented the highest degree of art, would not be sold by any respectable manufacturer of our time. The same is true of artificial hands, trusses, etc. The genius of American invention once directed to this fertile field for useful and profitable effort, there is no limit to the advances which it will make. Already in the treatment of deformities, mechanical appliances are accomplishing results which lead us to anticipate that they will yet monopolize this entire field of practice.

Mechanical surgery is a legitimate branch of the healing art. Whatever unprofessional men may have accomplished in the way of invention in any of its departments, has for the most part been the result of accidental circumstances. A farmer, annoyed by a hernial protrusion, has sat down at the side of his plough and whittled a block into a form that, when applied, answered its purpose well. It is often alleged in recommendation of an artificial leg that the inventor had an amputated limb, which directed his attention to this special study, and led to the invention of the limb in question. But mechanical surgery is not a simple branch of mechanics, to which any ingenious artisan can successfully turn his attention; it combines also an accurate knowledge of anatomy, of physiology, and of surgery, to pursue his profession. Rationally, the Mechanical Surgeon, or the "Surgeon Artist," to use an elegant phrase, must be a thoroughly educated physician as well as an inventive genius. A man might with as much propriety prescribe remedies without a knowledge of diseases as undertake to apply properly a truss without a knowledge of the anatomy of the malady. The same remark is true of every branch of mechanical surgery. Quackery in this department, or the pretensions of uneducated and unqualified men, are as gross and glaring as in the simple practice of physic.

The medical profession have too long regarded mechanical surgery as the legitimate field of non-medical men, or medical speculators in patents. This has tended powerfully to deter worthy and competent medical men from adopting any branch of it as a specialty, and thus the art has been until recently almost monopolized by the merest pretenders. But medical men of real merit have begun to enter this field of improvement, and already the ripe fruits of skilled labor begin to appear. The recent improvements in artificial limbs by Drs. Hudson of New York and Bly of Rochester, in trusses by Dr. Riggs, in apparatus for the cure of deformities by Drs. Davis and Wood, are the results of long and careful study of the anatomical or pathological abnormalities to which their respective appliances are adapted. From medically educated mechanical surgeons the profession may obtain many practical hints, and it is important that we have a class of artisans in these several branches to whom we may with confidence defer questions of practice. The place of election for amputation of the lower, and even the upper extremity, will always be decided by the mechanical surgeon. How important it is that he be thoroughly qualified to give a just decision.

But we need not multiply examples of this kind. It

must be evident to every one that mechanical surgery is a branch, and a most desirable branch, surgical science and art. As such it should be fostered by the profession, by every legitimate means. First, we should encourage educated medical men to engage in its several departments, as special objects of study and practice, and give them the most cordial support. If the profession recognise the claims of this branch of the healing art, and take under its protection those who devote themselves to it, there will be no need of patents to insure to an inventor the honest proceeds of his labor and study. Second, we should discountenance on all occasions, and under all circumstances, the uneducated pretenders in this department of surgery, who throng our cities, and trumpet their wares in every market. Whatever merit some may have as inventors, as a class, they are not entitled to the slightest consideration, and should meet with unqualified condemnation.

THE WEEK.

A London medical journal devotes an article to the establishment of "Certain Public Necessities." It says:—

"There are few sanitary questions which affect more immediately individual comfort and health than those involving an inquiry into the due provision of the means by which the out-door population and strangers of a great city may readily and decently 'relieve nature.' There are none which may be more appropriately discussed by the medical press; and there surely cannot be a point relating to the necessities of our common humanity upon which there exists less scope for false modesty in discussing it than the one upon which we now purpose commenting.

"Everyone meets here upon common ground, for no respect has been shown to persons. Man and women, the roughest and the gentlest of our race, all ages, the old man and the child, the sound and the sick, must yield alike to the calls of that nature with which they have been every one endowed. These calls we all know are imperative; sooner or later they must be obeyed; the time for which they may be disregarded with comparative impunity is but short under any circumstances, and under some almost inappreciable. Generally, if not attended to at once, great discomfort, or even disease, is the consequence. If such be the case when the body is in the possession of youth and health, how much more important is it that our physiological necessities be not unheeded when sickness or advancing years are influencing the frame. Inability to evacuate a distended bladder, or to relieve an irritable bowel, becomes a torture to the mind as well as to the body of the severest kind. The agony is sometimes almost unendurable. Life is rendered truly a misery to some people from the knowledge or the dread that if they once leave the privacy of their own home they may be quickly so circumstanced as to place—and very painfully, too—that life in imminent danger.

"Now it would naturally be supposed that to meet these stern wants, communities would, as a matter of course, make such public as well as private arrangements as might ensure their requisitions being easily and conveniently fulfilled. Disagreeable as the public confession of them may be, yet, as it is a necessity none are exempt from, we can the more readily put up with its explicit admission. Until within a very recent period, however, the conveniences accessible by the people at large were absolutely next to nothing. Even at present they are extremely few in number, and have reference to one exigency, and to a single sex. In order that the out-door world of a great city may feel at ease *quoad* the important physiologic necessities we are discussing, it should have the means of ready and modest access to *urinals*, *water-closets*, and *lavatories*. We do not, of course, pretend to say that the Government or any other public body is to supply the populace with all of these gratuitously. That would be out of the question as regards water-closets and lavatories. But as respects urinals not so, and for this it is that the demand is more urgent. Of such essential conveniences there should be provided at the public expense an ample number, and in such important thoroughfares, and withal so unobtrusively situated, as to be as readily found as they are modestly approachable. To be able always to combine the latter qualifications may be somewhat difficult, but under any circumstances we should be immeasurably better off than with the old stone boxes of the bridges, corners of public-houses, and the warning sign-boards at the entrance of dirty gateways and yards. Most of these were even more indecent than they were public, if that were possible."

—

The Ladies' Sanitary Association (London) is extending the sphere of its usefulness wider and wider. The tracts are not only widely circulated in England, but they have reached continental cities where the health authorities have in many instances reproduced them. A London contemporary thus speaks of the sphere to which this excellent association devotes its labors:—

"It enters the mechanic's room and the poor man's cottage, and talks, in a woman's voice, to mechanics' and poor men's wives. It points out that, though the court may be drained, or the cesspool removed, the living room must have its windows opened; that though the infant may have been vaccinated, it must be fed and clothed in a proper manner; that notwithstanding warm under-clothing and coals have been supplied by the parish or by public charity, soap and warm water must be provided at home. The children laid up with scarlet fever may have been seen by the doctor; but his aid will be but trifling if they are left half suffocated in the close atmosphere which reeks up from a dirty and slovenly bed. The mothers of families are taught that true economy exists, not simply in buying in a cheap market, but in knowing how afterwards to employ their bargains to the best advantage. There is a good cheap cookery, as well as a bad cheap one; an effective cheap mode of dressing, as well as an inefficient cheap style of apparel. The former are shown to be easily substituted for the latter. These are, after all, things in which most reform is needed within the poor man's dwelling, and which reform, when decorated by the thrift and comfort of hygienically regenerated wives and daughters, will do more towards the weaning of our working men from skittle-grounds and gin-shops than a millennium of Exeter Hall demonstrations."

—

Another institution for the accommodation of the sick and wounded soldiers, called the Ladies' Military Hospital, was opened in this city last week. The building occupied is that known as the Infants' Home, corner of Lexington Avenue and Fifty-first street; it will accommodate about 400 patients. Mayor Opdyke presided at the opening ceremonies, and thus alluded to the service of the Hospital: "Nor need we fear that there will be any failure to keep the promise implied in the inviting name which the ladies have given to their hospital. It will be to its inmates emphatically a Home, with every appliance for the alleviation of their sufferings that skill and earnest sympathy can suggest. The building itself is a model of its class, and admirably adapted to the purpose to which it is to be now applied. The wards are large and well ventilated. They have been thoroughly cleaned and fitted up with appropriate furniture and excellent bedding. The surgical and medical staff embrace the best professional skill in the city. The nurses

will also be the best of their class; and better than all, the ladies themselves, or at least a portion of them, will be in constant attendance to infuse into the hearts of others a share of that devotion with which they apply themselves to this beneficent work."

The Medical Officers are:—*Consulting Physicians*—Joseph M. Smith, M.D., Austin Flint, M.D., Edward Vanderpoel, M.D. *Consulting Surgeons*—Valentine Mott, M.D., Alex. H. Stevens, M.D., Richard Satterlee, M.D., U.S.A., Alex. B. Mott, M.D., Surgeon to the Home and Medical Director. Benj. F. McCready, M.D., Attending Surgeon. Walter Caswell, M.D., House Physician and Surgeon. Alfred E. M. Purdy, M.D., Senior Assistant. Jesse D. Pitt, Junior Walker.

—

The treatment of fractures on the battle-field is one of the most important duties of the Army Surgeon. The value of plaster of Paris as a dressing has recently attracted much attention, and is, we believe, adopted to some extent. By request, we have inserted in this number a very full paper on this dressing, taken from a lecture on Military Surgery, by Dr. Glück, and published in the *American Medical Monthly*, of December, 1855. Dr. Glück saw much service during the Hungarian war.

—

We learn from the *Syracuse Journal* that the Annual Report of Dr. Wilbur, the Superintendent of the New York Asylum for Idiots, located in that city, shows that at the close of the last year there were one hundred and thirty pupils in that institution. Six of the former pupils were temporarily absent, and there were several pupils accepted but not yet received. Of the State pupils connected with the Asylum, 18 have been inmates for more than six years; 11 for five years; 3 for four years and a half; 9 for four years; 4 for three years; 8 for two years and a half; 15 for two years; the remaining 50 having been inmates for a less period than two years. Plain, substantial, and convenient buildings, and out-buildings, secure the personal comfort of the inmates, and at the same time diminish the cost and labor of taking proper care of them. Fifty-five acres of excellent land, improved by thorough culture, and stocked with a large number of fruit-trees, afford the opportunity for the advantageous employment of the larger boys in agricultural labor.

THE CONSERVATIVE TREATMENT OF FRACTURES.

By Isidor Glück, M.D.

CHIEF SURGEON TO THE HUNGARIAN HUSSARS.

(*From the American Medical Monthly.*)

GYPSUM OR STUCCO BANDAGES.

Although even in compound fractures, where the wounded place has to be left uncovered, the application of Seutin's starch bandage answers this purpose best, still there are some objections to its being used in the field, or even in the hospital.

1. *It dries too slowly*, and cannot replace therefore *immediately* manual extension, which is required in order to retain the ends of the broken bone in mutual contact. It is, therefore, necessary to use machines or apparatus till the bandage becomes dry for 24–48 hours.

2. The *thickness* of the walls of the bandage *diminishes*, while the bandage becomes dry, and thus receding somewhat from the limb, cannot serve instead of the *manual extension*.

3. The application of the starch bandage costs on the field much time and trouble. The limb must first of all be surrounded by a roller, then covered with compresses and rollers, pasteboard and splints are then applied, and the whole again surrounded by a roller. The application of openings (windows) in Seutin's bandage is combined with difficulties. If the windows are made at the time when the bandage is applied, the same keeps *badly* together the fractured ends, and wood or tin splints must be used—if the windows have to be made when the bandage is *dry*, the wounded portion remains covered for a day or longer, and the excision or formation of the openings is in the hardened starch bandage yet more troublesome.

4. However dexterously we may apply the bandage, it will be pretty difficult to make so large openings as required, in order to expose the injured portion without loosening at the same time the *whole bandage*, while small openings or windows expose but a portion of the injured part.

5. In suppurating wounds, the pus discharged, as well as the fluid applied for cleansing the wound, and the moisture of the cataplasms, will run under the bandage and destroy the epidermis.

6. The hardening and unequally contracting starch bandage (i. e. quickly hardening at its thin portions, and slower in its thicker ones) exerts an unequal pressure and therefore an injurious effect on the *swollen parts*.

7. The starch bandage cannot be applied for transporting the wounded soldier, who receives on the battle-field a compound fracture, because it requires warm water (not always ready in the field) for preparing it: then again it dries slowly, the formation of windows causes loss of time and trouble, requiring the application of splints, and because the parts being covered for a day or two, are injured, as suppuration may follow, and the pus stagnates and runs into the bandage; in damp weather it becomes *moist* and *soft*, in the rain; it is, therefore, necessary to have ready-made *capsules* of starch bandage, and the so-called *movo-amovible* bandage, which often do not appose sufficiently, and cannot therefore replace manual extension.

Recently gypsum bandages have been suggested in Belgium, but their application, according to Dr. Mathieson and Van De Loo, is troublesome, and takes much time, so precious on the battle-field. This bandage is not lasting, its preparation and preservation still more difficult than that of Seutin's starch bandage; much more preferable and practical is the preparation and application of *gypsum bandages*, as made by Pirogoff,* and used by him to the greatest extent with the best results. The gypsum bandage is *on the battle-field* in many respects preferable to the starch bandage. The gypsum solution requires but *cold* water and turns *hard* as soon as applied, and replaces therefore *immediately* manual extension, and neither machines nor apparatus are required for that purpose. The dry gypsum bandage becomes so hard, that *no* splints are required, even if large windows are made, and transporting of the wounded soldier is *immediately* after the application of the bandage possible without injury.

The gypsum bandage is *simple* and *cheap*, as it consists of old *coarse linen* and *gypsum*: its application is simple and quickly made. The gypsum bandage replaces manual extension *perfectly*, the assistants need only for a *few minutes* keep the limb extended after the bandage has been applied, then the gypsum bandage is *stiff* and *hard* enough to retain the ends of the broken bone in the position given to them. Their displacement is *impossible* as long as the swelling does not diminish, and a *considerable* interspace is not formed between the limb and the bandage. Thus the gypsum bandage renders superfluous all machines for extension, as required, while the *starch bandage* becomes *dry*. Only by the application of the gypsum bandage in *oblique* fractures of the *thigh* it is necessary to fix the pelvis, and to retain the limb extended by means of a *bedtable*, and by weights attached to the extremity. More apparent yet are the advantages of the gypsum bandage in oblique fractures, where

* Prof. of Surgery in St. Petersburg (Russia.)

the ends of the broken bone are *distant* from each other, in compound fractures and generally everywhere where it is necessary to keep open a wounded spot. In Pirogoff's mode of applying the gypsum bandage, the openings (windows) may be made *at once;* through them it is possible to view the position of the broken ends, the excoriations and wounds, and the curative process may be watched in its course. The gypsum bandage does not contract like the starch bandage, interspaces form *slower* between it and the leg, as in the gypsum bandage the interspaces depend upon the *decrease* only of the swelling, and not, like in starch bandages also, from unequal hardening of the bandage, and then again it does not become moist and soft in rainy weather. In complicated fractures the pus may be discharged, and find exit through the large windows made, and does not burrow itself *under* the bandage as is common in the *starch* one. Wet dressings may be applied *immediately* on the wound itself. The gypsum bandage becomes hard immediately after having been applied; wounded soldiers may therefore be safely transported *immediately* after the application of the gypsum bandage, from one place to another, even in the rain, without the bandage being disturbed, although the gypsum bandage may appear *wet* externally, which sometimes lasts for a few hours. The gypsum bandage may therefore be cut through immediately after the application in the interspace of the splints, if that should be required, in consequence of too great a pressure or pains, &c.

In the battle-field as well as in the hospitals, for transportation of the wounded soldier in the treatment of complicated fractures, with great dislocation of the ends of the fractured bones, the gypsum bandage is preferable *to every other* kind of bandages.

REQUISITES NECESSARY FOR THE APPLICATION OF GYPSUM BANDAGES IN THE BATTLE-FIELD AS WELL AS IN THE HOSPITALS.

1. Long, old hospital stockings made of linen, cut in front along the seam (if the seam is behind the stocking it must be turned and cut); old drawers also cut along the seam, and divided for one or the other limb; sleeves of old shirts (or instead of those long linen flaps cut in the form of stockings, drawers or sleeves); jackets or old vests, abdominal bandages covering the body once and a half; for fractures of the bones of the rump, pelvis, and of the neck of the thigh and bone. These pieces of linen used for surrounding the limb must be *equal*, *soft*, and *dense*. All seams must be removed.

2. *Cotton* or cleaned soft *flax*, *pads* filled with soft material, lint or flax for filling up (for instance, around the trochanters, around the malleoli in the popliteal region, and around the achilles tendons), simple and graduated compresses.

3. *Splints* of different dimensions in regard to length, width, and thickness, made of old coarse *sack linen*, as used for instance in hospitals for mattresses or straw mattresses. The old sack linen is folded twice, thrice, or four times, to the width of two fingers to one-third of a yard. The splints must, in fractures of the leg, the upper and forearm, exceed at least one-third of a yard the fractured bone, and in fractures of the *thigh*, and that of the neck of the thigh, it must be one-third of a yard longer than the *whole* extremity.

4. Strips (compresses) of the same linen from .2 inches wide, and of such a length as to surround the limb once or twice, they are calculated to fasten the splints, and are called *transversal* stripes (Pirogoff). These transversal stripes may be made also of fine linen, if the bandage should be a light one.

5. Plaster of Paris (gypsum) in form of fine powder and well dried. For the application of a bandage, never less than 2 lbs. have to be used (as for fracture of the forearm), nor more than 7 lbs., as for fracture of the neck of the thigh bone.

6. A vessel with cold water. The gypsum solution should not harden sooner than in five or eight minutes, in order to allow the application of the bandage. Although hardened, it still looks wet from the evaporation of the water, out of the bandage painted over with gypsum solution, and the patient may safely be carried with it.

7. *Large brushes*, as used by house painters. Besides those necessary requisites in hospitals, may be used finer linen rollers for simple fractures and splints made out of pasteboard; and for complicated fractures, with large wounds, *splints* of wood, of different dimensions, together with pads attached to them on both ends, and also a few pieces of sheet iron or tin may be held ready.

THE APPLICATION OF GYPSUM BANDAGES,

Is made in the following way: The injured limb is first surrounded with dry linen, a sleeve, a linen stocking, or with half a drawer. Bony prominences must be wadded, and hollows filled out with cotton. The linen surrounding it must not be too thin, nor have holes in it, in which case the linen must be doubled, or the limb first covered by cotton. If this is not done the moisture presses to the skin, and the patient complains of a cold or burning sensation.

2. The broken limb is put in the required position, the extension is then made, and the fractured ends then approximated. Sometimes it is necessary to begin with the reduction, and subsequently follows the surrounding of the limb.

3. The splints and the transverse strips of sack linen, each three or four times folded, are put near the patient *in that* order as required to be later applied to the limb. An assistant prepares the solution of gypsum and paints with it the splints and strips, or rather dips them into the solution and brushes them with it. The proper application of the bandage depends now upon the gypsum solution. If the solution be too *thick* it dries *quick*, the splints and transverse strips are not *united* firmly together, nor are the splints firmly fixed if the solution be too thin. When the solution becomes denser, water must not be added to it, as the solution becomes through it creamy, is not imbibed by the linen, cannot be smoothed, does not adhere, and takes a long time to become dry.

5. The splints and strips of linen must be dipped in the solution, which I now prepare by adding to two pounds of water the equal weight of gypsum. They must be extended and swinging free, and must thus be brushed over on both sides with the gypsum solution as you see it here.

6 The splints must be applied longitudinally to the limb, and must be fixed by the transverse strips, carried around both the limb and splint. The transverse strips are applied in pairs, so that the one should cover the other partially. The splints may be applied in such a manner that the one should cover the other partially, or, what is prefcrable, in such a way that between the splints should remain a free open space on *the side*, in *front of*, or *behind* the limb. The assistants producing extension must continue to do so until the bandage is *hardened*, i. e. about eight minutes after the gypsum bandage has been applied. During its application the limb must be kept extended free, in order to be accessible from all sides. The splints must be pressed firmly to the limb by the hand. The *transverse* strips must be drawn firmly and tightened around the limb, and by the hand or brush well covered with gypsum solution, in order that all prominences and hollows should be equalized. In oblique fractures and dislocations of the fractured ends, at least two layers of transverse strips are necessary. But if the bandage has yet to be removed, it is necessary—

1st. To apply the splints with a space between them.

2d. The transverse strips are covered from the middle (where about the extent of two inches remains uncovered) towards their ends with gypsum solution.

3d. The transverse strips are applied so that the uncovered part should correspond in its situation to the longitudinal interspace between the splints.

In the field it is necessary to have arranged, before the application of a bandage, all requisites in one package for each fracture separate. Thus, for fracture of the forearm, the bandages should be separate from those for fracture of the leg, as you see it here.

(*To be Continued.*)

Medical News.

Death of Dr. Alley.—It is with sincere regret that we have this week to record the death of Dr. John B. Alley. The event was not unexpected either to himself or to his friends, as he has been for a long time in declining health, and, latterly, it has been evident that he could not long survive. The void occasioned by the death of Dr. Alley, not only in the ranks of the profession, but in the hearts of all who knew him, will not soon be filled. We all remember how for years he has faithfully stood by his post, when his strength was often well nigh exhausted, determined to shrink from no duty, so long as life remained, to further the interests of humanity; and we can all testify to the scrupulous fidelity with which he performed the responsible and often arduous official duties that devolved upon him. It is probable that the state of his health did not permit him to share largely in private practice, but the Massachusetts Medical Society will cherish his memory for the able and faithful manner in which he has so long guarded its interests; and the city of Boston owes him a debt of gratitude which never can be paid for his long and efficient services as Superintendent of the Boston Dispensary.—*Bost. Med. Jour.*

Military Hospitals in Cincinnati.—There are at this time, in this city, four large hospitals, devoted exclusively to sick and wounded soldiers, namely: one on Lock street, known as the Marine; one on Fourth, between Main and Sycamore; one on Third; and one on George, between Baymiller and Freeman. Dr. John Moore, Assistant-Surgeon U. S. A., we believe, has charge of these. At the Marine Hospital, he is assisted by Dr. E. Williams; at the Fourth Street Hospital, by Dr. J. B. Smith; at the Third Street Hospital, by Dr. J. A. Murphy; at the George Street Hospital, by Drs. David Judkins and Wm. B. Davis. Each of these gentlemen receives one hundred dollars per month, compensation for his services. Besides these hospitals, there are soldiers at the Commercial Hospital, St. John's, and St. Mary's. The number of patients now on hand we are not informed; we presume it is constantly varying. Some two or three weeks ago, there were at the Fourth Street Hospital, under Dr. Smith, 215; there had been received into the house, 312; of this number, twelve had died. A large increase in the present number will doubtless take place from the wounded in the late battle at Pittsburgh, Tenn. We undertand that hospital accommodations will be fitted up at Camp Dennison, a few miles from the city, to meet the necessity.—*Med. & Surg. News.*

Phrenology—One would have thought that, after his execution, people would no longer talk of the famous Dumollard, the servant killer; but on the contrary, it now happens that his skull has fallen into the hands of phrenology, and the disciples of Gall and Spurzheim seek to prop up their theories with the bumps of this head severed by the executioner. It is exceedingly curious to see the results arrived at by enthusiastic phrenologists who have studied this skull, and the efforts they have made to "specify" the general faculties they have observed. For instance, they admit that Dumollard had not the bump of murder; but they do not consider themselves beaten for so little. In return, he had the bump of "secretiveness," or, in other words, cunning. But what is less easy for them to account for is, that he also possessed the bump of benevolence—which is rather startling. Nevertheless, by making a strict search of his life they find something that does not roundly contradict even this fact. It seems that phrenology is as elastic as India-rubber.—*Brit. Med. Jour.*

Sir Benjamin Brodie has a second series of his *Psychological Inquiries* nearly ready for publication by Messrs. Longman and Co.

Photographs of the Eye.—At a late meeting of the American Photographical Society, Dr. Henry D. Noyes exhibited a negative showing the optic nerve and interior of a rabbit's eye. The impression was obtained by a newly invented instrument devised by himself and Mr. Grunow, a practical optician. Such a photograph has never been obtained before in this country, although it is said to have been done in France. The interior of the eye, namely, the retina and optic nerve, has been disclosed to observation in the living person, by an instrument invented in Germany, called the Ophthalmoscope. This has been in use for ten years, but it is only now that the interior of the eye has been photographed. Dr. Noyes explained the working and principles of the new Ophthalmoscope, by the aid of diagrams, and the presentation of the instrument itself. Through it diseases of the eye can be studied with greater facility, and scientific records of them kept. The instrument displayed in its elegant and finished workmanship the highest mechanical skill. The discourse of the doctor was listened to with close attention, and the audience expressed their approbation by applause.—*American Journal of Photography.*

The following General Order has been issued from the Adjutant-General's office:

First: Assistant-Surgeon William A. Hammond, U.S.A., having been appointed by the President Surgeon-General, with the rank of Brigadier-General, under the act approved April 16th, 1862, will enter without delay upon the duties of his office.

Second: Applications for transportation for the removal of sick men, for nurses, and for supplies for the sick, will be hereafter made to the Surgeon-General. The Surgeon-General is also authorized to give passes, at his discretion, for private physicians, nurses, and friends of the sick and wounded soldiers, to attend and visit them.

Maine Medical School.—The clinic of this School, by Drs. Childs and Dana, for Saturday, April 19th, is reported in the *Brunswick Telegraph.* Eleven cases were treated, some of them of an interesting character, the operations being performed by Dr. Childs. Dr. Robinson's course of lectures being brought to a close, a suitable valedictory address to the students was made by him, and a letter of thanks from them was returned. Dr. Nourse, of Bath, commenced his course of lectures on Monday.—*Bost. Med. Jour.*

Pertussis.—Dr. H. Holmes, in a paper read before the *Middlesex* (Mass.) *Medical Society*, recommends the following: ℞ Tr. Cardamomi Comp. ʒss; Syr. Simpl. ʒiiiss. Acidi Nitrici, gtt. xxxij. M. Sig. From five drops to one teaspoonful to be given frequently, according to the age of the patient and the severity and frequency of the paroxysms.—*Med. and Surg. News.*

A French journalist says that, if the inhabitants of the Seine Department were equally divided among the doctors, each doctor would have one thousand persons out of whom to get his clients. The moral to be drawn from the fact, he adds, is this: that the young doctor who has not means of existence besides what he may get from practice, and settles in Paris, is a madman.—*Brit. Med. Jour.*

A New Hæmostatic Agent of great power has been recently announced. It is an extremely delicate and beautiful fern from Java, the Pengawar Jamba (*Palea Tibotti*), provided with very fine filaments, which are said to be used for the above purpose with great effect.

Dr. C. A. Finley, late Surgeon-General, has been retired from service at his own request, by the President.

Dr. J. H. Thompson, of this city, Brigade-Surgeon in Burnside's Command, has been discharged from service, as an alarmist.

Dr. Everett, of Quincey, Ill., Brigade-Surgeon in Gen. Prentiss's Division, was killed at the battle of Pittsburgh Landing, while endeavoring to rally the troops.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 28th day of April to the 5th day of May, 1862.

Deaths.—Men, 90; women, 86; boys, 118: girls, 107—total, 401. Adults, 176; children, 225: males, 208; females, 193; colored, 8. Infants under two years of age, 152. Children reported of native parents, 26; foreign, 17.

Among the causes of death we notice—Apoplexy, 8; infantile convulsions, 19; croup, 8; diphtheria, 10; scarlet fever, 26; typhus and typhoid fevers, 4; consumption, 73; small-pox, 14; dropsy of head, 21; infantile-marasmus, 15; diarrhœa and dysentery, 0; inflammation of brain, 15; of bowels, 5; of lungs, 27; bronchitis, 7; congestion of brain, 14; of lungs, 8; erysipelas, 15; whooping cough, 3; measles, 1. 215 deaths occurred from acute diseases, and 36 from violent causes. 282 were native, and 119 foreign; of whom 81 came from Ireland; 10 died in the Immigrant Institution, and 48 in the City Charities; of whom 11 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

April & May. 1862	Barometer.		Temperature.			Difference of dry and wet bulb. Thrm.		Wind.	Mean amount of cloud.	Humidity Saturation, 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In.	°	°	°	°	°			
27th.	30.80	.07	48	37	60	9	10	N. to SE.	1	500
28th.	30 10	.24	47	37	60	3	6	N.E.	9.7	794
29th.	30.00	.04	45	37	54	2	6	N.E.	6	864
30th.	30.04	.10	50	40	64	5	9	NE. to SE.	1	680
1st.	29.90	.10	47	46	75	1½	3	N.E.	10	940
2d.	29.98	.14	51	45	60	2	3	NE. to SE.	9 9	880
3d.	29.84	.07	55	45	65	5	8	NE. to SE.	2	726

Remarks.—27th, Clear, with fresh wind. 28th. Cloudy, light rain P.M. 29th, Fog A.M., light rain during the day, clear late P.M. 30th, Clear, hazy late P.M. 1st, Variable sunrise, rainy day. 2d, Rain till 4 P.M., fog evening. 3d, Fog A.M., day mostly clear.

REPORT OF THE METEOROLOGICAL COMMITTEE OF THE N. Y. CO. MEDICAL SOCIETY, READ MAY 5, 1862.

Summary of Meteorological Observations, April, 1862.

	Degrees.
Mean temperature for the month of April	47
" " at 6 A.M.	40
" " at 10 A.M.	47
" " at 2 P.M.	55
" " at 6 P.M.	49
" " at 10 P.M.	43
Mean temperature of evaporation at 6 A.M.	36
" " " at 10 A.M.	41
" " " at 2 P.M.	46
" " " at 6 P.M.	42
" " " at 10 P.M.	39
Mean minimum temperature	38
" maximum "	56
" temperature of evaporation	41
Minimum temperature in the month, on the 9th	26
Maximum " " " " 18th	83
Minimum " of evaporation	23
Maximum " " "	75
Mean weight of vapor in a cubic foot of air	2·4
Minimum " " " " "	1·67
Maximum " " " " "	7·17
Mean height of barometer at 6 A.M.	in. 30·08
" " " at 2 P.M.	30·11
" " " at 10 P.M.	30 06
Mean height of barometer for the month	30·07
Minimum " " on the 22d	29·45
Maximum " " " 27th	30.40
Inches of rain, less than usual	2
Days of Easterly winds	15
" Westerly winds	15
Days mostly clear	18
" " cloudy	12
Days mostly of rain and snow	4

Remarks.—The last snow storm of the season on the 9th, with high wind. The barometer ranged unusually high. Very warm weather prevailed during the middle of the month. The weather was fine and not as variable as usual. Wind mostly fresh. Upon fifteen fine days the wind blew in the morning from the land towards the sea, and in the afternoon from sea landward.

MEDICAL DIARY OF THE WEEK.

Monday, May 12.
New York Hospital, Dr. Halsted, half-past 1 P.M.
Bellevue Hospital, Dr. Thomas, half-past 1 P.M.
Eye Infirmary, 12 M.

Tuesday, May 13.
Bellevue Hospital, Dr. Loomis, half-past 1 P.M.
Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
New York Hospital, Dr. Griscom, half-past 1 P.M.

Wednesday, May 14.
Bellevue Hospital, Dr. Sayre, Is. Hos., half-past 1 P.M.
" " Dr. Flint, Is. Hos., 3 P.M.
Eye Infirmary, 12 M.
New York Pathological Society, 8 P.M.

Thursday, May 15.
New York Hospital, Dr. Halsted, half-past 1 P.M.
Bellevue Hospital, Dr. Barker, half-past 1 P.M.
Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M

Friday, May 16.
Eye Infirmary, 12 M.
Bellevue Hospital, Dr. McCready, half-past 1 P.M.
New York Hospital, Dr. Griscom, half-past 1 P.M.

Saturday, May 17.
Bellevue Hospital, Dr. Wood's Clinic, 1 P.M.
Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M

Dr. Alfred C. Post has removed to
269 Madison Avenue, above 40th Street.

Notice of Removal.

Dr. Hanbury Smith
has removed his
LABORATORY AND SALESROOM TO
808 BROADWAY, Opposite Eleventh Street.

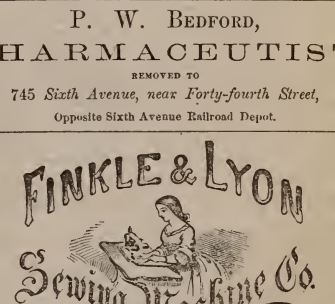
Removal.

William Wood,
(Late S. S. & W. Wood,)
MEDICAL BOOKSELLER,
has removed to
No. 61 Walker St., (Four doors West of Broadway.)

Dr. Nœggerath
has removed his office to
125 WAVERLEY PLACE.

John W. Shedden, Apothecary,
368 Bowery, cor. 4th St.
Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

P. W. Bedford,
PHARMACEUTIST,
removed to
745 *Sixth Avenue, near Forty-fourth Street,*
Opposite Sixth Avenue Railroad Depot.



Descriptive Circulars with Samples of Work will be sent mail free.

Having just completed the most successful season's business they have ever enjoyed—wherein they have demonstrated that, *for all kinds of work*, they have "THE SEWING MACHINE OF THE WORLD"—enter upon the New Year with still more important improvements, the latest being their

"NEW TAILORING MACHINE."

Having heretofore aimed almost wholly to supply a Family Machine, which should do all kinds of family sewing, and having succeeded, we now enter the market with a Manufacturing Machine, which, for elasticity and strength of stitch—for rapid movements—for simplicity and durability, defies competition. While adapted to make the HEAVY ARMY AND NAVY COATS, with linen thread, it can, by a slight change, be made to do the fine family sewing; thus combining in one machine adaptation to FINE FANCY SEWING and HEAVY MANUFACTURING. This can be best appreciated by those who have owned and operated machines. We do not ask or expect the public to be governed by our statements alone. *We court investigation*, and refer to the thousands who have our machines in successful operation.

FINKLE & LYON SEWING MACHINE CO.,
538 Broadway, New York.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians (principally country Physicians) Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bonrbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bonrbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyosciamus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anæmia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.
SESSION 1860-61.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

LECTURE VIII.—PART II.

Dentition, and the Etiology of the Affections of the Respiratory Organs, Ear, and Eye.

(*Continued from page* 179, Vol. iii.)

After all my previous remarks on the nature and pathology of the mucous membrane in general, a few additional words will suffice to illustrate the relation of diseases of other organs to the protrusion of teeth. For the organs of digestion are not the only ones which are said to be influenced by, and to suffer from, dentition. Many diseases of the uropoietic, sexual, respiratory, and sensory organs have been attributed to the same cause.

Diseases of the respiratory organs are very frequent in infantile age. The liability to catarrhal and inflammatory affections of the bronchi, etc., decreases, as a general rule, with the age; so much so, that their number during the time of dentition is decidedly less than before. This circumstance alone ought to render us careful in speaking of the protrusion of teeth as a cause of diseases of the respiratory organs of whatever character. The etiology in a given case is by no means unimportant; as the prognosis and even treatment depend a good deal on the causes of the affection. Among these the influences of weather, temperature, and seasons, rank very high, as is well known; a number of epidemic diseases, as morbilli, whooping-cough, and scarlatina, exhibit, too, a great tendency to complications with catarrhal affections of the respiratory organs. These affections, however, appear frequently without peculiar danger, being the direct results of the state of the atmosphere, exhibiting an epidemic character. Many other diseases are liable to the same complications. Thus rhachitis, syphilis, scrofula, and tuberculosis, are among the principal causes of bronchial catarrh and pneumonia; inflammations of a croupous character engender in the neighboring organs the liability to catarrhal affections of the mucous membrane; and pseudo-membranous croup in the larynx is often combined with bronchitis and bronchopneumonia; and even marasmus resulting from copious secretions or defective nutrition, appears to give rise to severe and obstinate catarrh of the respiratory organs, by the inspissation of the blood and by the impediment to the normal circulation.

As it is not my object to give the full pathology of the organs which have been believed to be endangered by the process of dentition, I hardly need speak of the variety of forms of catarrhal and inflammatory affections depending on the age of the patients, the seat and severity of the disease, and its primary or secondary character. In very small infants, catarrh of the bronchi is most dangerous; the more so, as not only the large ramifications will be affected, but the last ends of the air-tubes will be easily involved, when we have developed the dangerous complexity of symptoms belonging to capillary bronchitis. The severity of the symptoms, the chills, uneasiness, restlessness, thirst, cough, pain, dyspnœa, cool extremities, the local physical symptoms, and nervous affections, as convulsions, depend on the extent and situation of mucous membrane and pulmonary tissue involved in the process. Many inflamed lobuli in a single lobus will not, as a general rule, bring on the same amount of dyspnœa as the same number interspersed in the healthy tissue; cough will be more frequent in mere affections of the mucous membrane, or in the last stage of pneumonia, than in its first stage, and where the symptoms of pneumonia predominate over those of catarrh. Bilateral affections are much more dangerous than those confined to one side; so much so, that bilateral pneumonia in very young children is an almost always fatal disease; and nervous disorders, as convulsions, are exceedingly more frequent in affections of the upper lobes of the lungs than in the other. Catarrh of the trachea and first ramifications is seldom a cause of great dyspnœa; in the ramifications of the second order the alternations of the utmost dyspnœa and comparative ease depend on the presence or removal of the secretion, and are characteristic of this locality; the catarrh of the capillary ramifications has been stated to be very dangerous indeed. Nasal catarrh is liable to be transmitted through the naso-lachrymal duct to the conjunctivæ of the eyelids and the bulbus, especially the chronic form, depending on dyscrasic causes. Laryngeal catarrh, with its peculiar croupy cough, and hoarseness, and intense reflex sensitiveness resulting in troublesome attacks of coughing, and its frequent complications with catarrh of the pharynx, is not rarely complicated with catarrh of the Eustachian tube, and even the external ear; and all of them have a decided tendency of successively or simultaneously endangering the whole mucous membrane of the respiratory organs.

Whatever, then, I have cursorily stated on the causes and nature of catarrhal and inflammatory affections in this locality, shows that dentition is certainly not frequently to be blamed for their presence. I have here again, as in other instances, laid the most stress on the large number and variety of causes, in order to show that a differential diagnosis and exhaustive knowledge of general etiology will keep us from falling into the well known errors and misconceptions, universal in the public, and still frequent in the minds of professional men. Nor is there any connexion between dentition and the treatment of the affections alluded to, with their fever, copious secretion, dyspnœa, and other symptoms. I do not see why a regular and strict diet, fresh and moist air, and uniform temperature required in the treatment of bronchial catarrh or pneumonia, should be considered as being in a direct relation to dentition; nor do I detect any between this physiological process and the febrifuges, veratria, digitalis, quinia, and antimony; or narcotics, as opium, hyoscyamus, and cannabis; or derivants, sinapisms, vesicatories, and local depletions; or expectorants of both mild and stimulant character, antimonials, ipecac, muriate, acetate, and sesqui-carbonate of ammonia, senega, camphor, benzoic acid, and others.

The catarrhal affections of the eye, and the catarrhal otorrhœa, have already been alluded to. Their etiology, and therewith the possibility, or probability, of their dependence on dentition, have been spoken of on different occasions. I, therefore, leave you to the inferences naturally resulting from all my previous lectures. The only thing, however, to which I desire to direct your attention, is the occurrence of otorrhœa in all the periods of rapid cranial development, especially in such children who from bad habits, hot pillows and bonnets, or hereditary or acquired scrofulous disposition, are liable to accumulations of an over amount of blood in the head. That in a time where the physiological development of the head closes sutures and fontanelles, raises teeth, and increases the amount of cerebral substance by a normal hyperæmia, otorrhœa should occasionally show itself, is no more wonderful than the fact clearly proven by every day's experience, that most cases will come on without serious symptoms of any kind, and gradually disappear spontaneously, no remedy having been resorted to besides cleanliness, and in some cases a gently astringent application.

At all events you perceive how little there is in that "teething through" or "over" the chest, ears, or eyes.

Original Communications.

SURGICAL SERVICE
OF THE NAVY IN TIMES OF WAR.

TRANSLATED FROM THE FRENCH OF
JULES ROCHARD, M.D.,
SURGEON IN CHIEF OF THE FRENCH NAVY.

CASE OF THE WOUNDED.

The navy is, above all things, made for war; that is its principal mission, and it is to that end that all the elements of its organization ought to tend. The *service of the wounded*, in time of action, is among the most important, and at the same time the most difficult duties of the navy surgeon. At sea, as on land, war has *exigencies*, before which everything must give way, and which often oppose almost insurmountable obstacles to the fulfilling of their charge. They must at such times have as much resignation as devotedness, as much coolness as experience, to be fully able to answer the calls made upon them.

The difficulties are not the same in the navy as in the army. They consist, after a principal land battle, in the number of the wounded, the extent of ground they cover, and the insufficiency of the means of transport; after a naval engagement, on the contrary, it is the crowding of the wounded into a small space which interferes with the proper surgical attendance. The position of the sailor is better than that of the soldier. He has not to fear being left behind, and falling into the hands of the enemy; he has not to suffer long hours of agony whilst waiting for help to reach him; he is always sure of an asylum, and however deadly the fight may be, the number of surgeons, and the resources at their command, are sufficient to meet all emergencies. But these circumstances, favorable as they may be for the wounded, embarrass the officers. On land the wounded never interfere with the evolutions, on board they necessarily hinder the working of the vessels.

A squadron can be engaged at anchor, and under sail or steam.

At Anchor.—In this case it can be engaged with forts before which it has taken its position, or with a division of the enemy, attempting to drive it away. Since the Empire, the battle of Navarino is the only one that a French squadron has fought under sails. All other engagements have been against forts or batteries, of which the results have rarely been very deadly. Thus at St. Jean d'Ulloa, where the French frigates, anchored at four cable lengths from shore, were exposed during three hours to the fire of one hundred and sixteen guns, and the Iphigenie was struck in her hull by over one hundred balls, our losses were only five killed and thirty wounded, of which five were officers, whilst on the Mexican side over four hundred men were killed or wounded. At Tangier, Mogador, and Salé, they were still less. At Petropaulski the fort had only eight wounded. At Sveaborg only a single one. At the attack on Sebastopol on the 17th October, the French and English squadron were under the fire of three hundred and six guns of the heaviest calibre during five hours, at an average distance of seven cable lengths. These guns were served by experienced gunners, and yet at the end of the action the twenty-four vessels composing the French squadron, among which were twelve ships, had only lost thirty men, and had only one hundred and eighty-one wounded. The English were rather more unfortunate, having had forty-four killed and two hundred and sixty-six wounded.

In such instances there are no difficulties in the way of the surgeons. The wounded follow each other at long intervals; there is plenty of time to remove them, to give them the necessary attention, and enough room for them to lie down.

When, however, the squadron at anchor receives the shock of the enemy coming from the seaward, master of their position, being able to concentrate their fire, shift their position, and approach as near as they please, the results are generally very deadly. Of this the battles of Aboukir, Navarino, and of Sinope, are examples. In such bloody affairs the surgeon is under as many difficulties as he would be during a combat under sail or steam. He has, however, one resource the more. The vessels at anchor are broadside to the enemy, and unless they are surrounded, as at Aboukir, they only fire from one side. The other side is consequently unoccupied, and can be used as a temporary depôt for the wounded. One of the surgeons can make an examination, and after a preliminary dressing send back to the service those who are only slightly wounded, and to the *post for the wounded* those who are still able to walk; place under shelter, as well as possible, between the dismantled guns, the poor unfortunates who have only a few moments longer to live, and only send down, by means of slings, those whose state demands immediate attention. By this means the larger part would be spared a long and painful carriage, and the batteries towards the enemy's side would be immediately disencumbered.

Combat under Sail or Steam.—In this case both broadsides must be ready for action. As they must be completely disengaged so that the fire may not be diminished, the wounded must be taken away at once, and at this time the difficulties which we have pointed out are most painfully felt.

When, during exercise, the decks are cleared for action, it takes at the lowest calculation from four to five minutes to take up a man supposed to be wounded, to carry him to the hatchway, place him in the slings, lower him down, and hoist the slings up again, and this when the ship is at rest, every one keeps his presence of mind, and the sailor does not require careful handling. It is allowable to suppose that in the midst of the smoke, of the noise, and of the confusion inseparable from a fight, a still longer time would be requisite to remove a man badly wounded; but allowing nothing for this difference, taking the ordinary case of a vessel which has received one or two broadsides at close quarters, if she has only fifty wounded, it would take over three hours to lower them into the cockpit, allowing that no fresh casualties increase the number; and during all this time the guns would be encumbered, and the gunners would not be able to serve their pieces without being obliged to tread on the bodies of their comrades. It is indispensable that a more expeditious way should be devised to secure the speedy removal of the wounded. To us this seems possible. 1st. Necessity for establishing two passages for the wounded. On board steam vessels, whenever an affair promises to become serious, it seems to us indispensable that there should be two passages opened for the removal of the wounded, one forward and the other aft. The length of these vessels, and their division into two parts by the machinery, makes a necessity for this. The forward and aft hatchways are large enough for a litter or bench to be lowered down there, either to the cockpit or the orlop deck, and once there the object is attained. The rest concerns the surgeons and the men under their orders. 2d. Means of transport. The regulation frame answered all purposes on board sailing vessels, but it is difficult to handle in the narrow hatches of our modern ships. It is too long, and swings too much. If it is only hung by a single line, as is done on several ships, it hangs in all directions, and can take all imaginable angles; if it is hung by the two ends, it can still have lateral oscillation; lastly, if it is held at the four corners, it is true it descends vertically, &c.

Three conditions are indispensable to attain these results. 1st. An easy passage and commodious means to lower them into the hold. 2d. Sufficient space to perform the urgent operations and the first dressings. 3d. A place spacious enough to spread the mattresses.

These are easy enough to be attained when the wounded are small in number, and are brought in at long intervals;

but these are only exceptional cases. It is well known how deadly naval combats are. At the time of our maritime wars it was not uncommon to see the vessels which had been in the midst of the fight withdrawn with a third or a half the crew *hors de combat*. It would be easy to find examples to show that this number has often been exceeded. We refer only to one, the darkest and most bloody, it is true, of the bad days of our history :—after the battle of Trafalgar, most of the vessels taken by the English only had a handful of men left to defend them. The Fougueux had lost four hundred out of a crew of seven hundred. The Intrepide lost three hundred and six. In that small space, in which are crowded so many men and so much cargo, the want of room is a permanent difficulty. The engagement, the damage done by the enemy's fire, always cause a disorder still further augmented by the presence of the wounded, who must be removed as promptly as possible from the decks. It is not only a question of humanity, but their presence cramps the working of the guns, and produces the most baneful effects on the morale of their comrades. They must receive immediate attention, so that they may be placed in a safe place, and may lie down as well as can be until they can be carried back to the gun decks; in other words, until the end of the action.

(To be Continued.)

CASE OF INVERSION OF THE UTERUS.

By J. BYRNE, M.D., M.R.C.S.E.

OF BROOKLYN, N. Y.

Mrs. B——, æt. 32, of spare habit and of a somewhat nervous temperament, was seized with labor pains at seven A.M. on the 19th ultimo, which being slight and of short duration, or as her nurse termed them, "cold twitches," it was not thought advisable to send for me. About half past nine A.M. her pains became more severe, and as it was then my hour for being out I could not be found when sent for, and before ten o'clock her baby was born. Having had on two previous occasions some difficulty in removing the placenta, and fearing the same trouble again, she became alarmed and sent for the nearest medical aid. The placenta was removed after a good deal of hard work and no little pain to the patient, by the gentleman referred to, about eleven A.M. I saw her for the first time about half past eleven, and found her, as was usual after her previous labors, much prostrated, with pulse 120, but otherwise "comfortable." She said the extracting of her afterbirth gave her more pain than the previous part of her labor, and more than she had ever suffered before under similar circumstances. However, as she seemed to be on the whole pretty easy, I contented myself by giving the nurse some ordinary directions and enjoining perfect quietness.

With the exception of a little nervous fever, everything went on well until the eighth day, nor had she, during the whole week, a single symptom indicative of uterine or peritoneal trouble. Having had no operation from her bowels for two days, I prescribed a dose of aperient medicine, and left with the intention of not calling again for two days.

About seven P.M. I was sent for in great haste, and when I arrived was told by the nurse that, in sitting up to have an operation from her bowels, something as large as a child's head had come away from her and was then lying on the bed. On raising the bedclothes I found to my astonishment what I had little difficulty in recognising as an inverted uterus. Before attempting to replace it I examined carefully, and on the fundus remarked three or four clots of blood adhering, which on removing I found had escaped from a lacerated looking surface, and from which blood continued to ooze. I should here remark that she had during all this time neither backache, bearing down sensations, nor the slightest indication of faintness or sinking, and pulse from 110 to 120. I returned the uterus into the vagina after a good deal of trouble, but without causing any pain, my next efforts being directed towards reverting it. This, however, I found no easy matter, partly owing to the contracted condition of the os uteri, and principally on account of the very thin and flabby condition of the fundus, which deterred me from making a very great amount of pressure. Having wearied both muscle and patience without success. I sent for a medical friend in whose ability I had confidence, but all his efforts were likewise in vain, and we gave it up for the present, having ordered three grains Dover powder every two hours. At nine A.M. on the following morning I saw her, and on inquiring how she spent the night, was told that *she felt as comfortable as if nothing had happened*, but owing to her great anxiety slept but little. On making a vaginal examination I found things pretty much as I left them on the previous evening, and was told that she had passed water freely during the night. Renewed attempts at reduction failed, and the propriety of using chloroform was agreed upon; however, the case being a most dangerous one, I requested the assistance of Professor Barker, of New York. He saw her about half past nine P.M., twenty-six hours after the accident. The anæsthetic having been administered, Dr. B. proceeded to return the uterus, and after over an hour's hard work, and an amount of force which I thought at the time almost incompatible with the safety of the patient, the organ was replaced with an audible snap. The subsequent progress of the patient was as uninterrupted as if nothing unusual had taken place.

A CASE OF
SEVERE PUNCTURED WOUND:

BODY TRANSFIXED BY A BAYONET:—RECOVERY.

By B. J. D. IRWIN, M.D., U.S.A.

MEDICAL INSPECTOR 4TH DIVISION, ARMY OF THE OHIO.

In the early part of February, 1861, the various tribes of Apache Indians, inhabiting the mountainous regions of Arizona, broke into open hostilities against the government, perpetrating atrocities and unheard-of cruelties upon the unfortunate white settlers, and torturing their luckless captives in the most barbarous and cruel manner. Unfortunate prisoners were starved, others tied up for slow target practice, and some were hung up by the feet and broiled to death by fires built beneath their subverted heads! It was during the enactment of this ferocious crusade, that the following interesting case came under my supervision.

A small party of our troops were hemmed in, in one of the gorges of the Chirricahui Mountains, by superior numbers of Indians, who were endeavoring to capture our slender force. We held some prisoners of theirs as hostages for the safety of some citizens in their possession, whom we desired to exchange. On a certain occasion, the prisoners in our possession made a simultaneous attempt to break away from our guards. One robust athlete, æt. about 25 years, was knocked down by the sentinel by a blow from a musket on the back of the head, and *held pinned to the earth by a bayonet which transfixed his body.* The weapon entered the abdomen in the anterior upper angle of the left hypochondriac region, passed directly backwards and downwards, and made its exit a little below the posterior corresponding space, about two inches from the vertebral column. The victim was held in that position for some moments, until succor arrived to secure him and his desperate associates. A paroxysm of momentary weakness was all that appeared preternatural in him. The amount of hæmorrhage was very slight, and the man did not present any of the symptoms to be expected from so serious a lesion. He was tied and placed on his back; kept strictly quiet, and the cold water dressing applied—*snow-water* was used from necessity. The diet allowed was of the sparest kind. Not a bad symptom appeared, and on the *fourth day* the wounds were perfectly healed by adhesive inflammation. He complained but little of any pain or distress, which I attributed to the innate pride of his stoical character; being a brother

of the chief of his tribe, he held it beneath his dignity to manifest any external show of physical or moral suffering. On the ninth day he walked to the place of execution, where he, with five of his companions, was hung to the boughs of two stately oaks, overshadowing the graves of some fourteen of our citizens, whom the savages had treacherously and cruelly tortured to death while prisoners in their hands. As we were desirous of making a lasting example to our treacherous foes, the bodies were allowed to remain suspended permanently, which prevented my making a *post-mortem* examination of the body of the one whose case I have described.

"FIELD OF SHILOH," TENN., April 18, 1862.

Reports of Hospitals.

NEW YORK EYE INFIRMARY.

STAPHYLOMA CORNEÆ,

WITH CASES AND REMARKS,

BY HENRY D. NOYES, M.D., ASSISTANT SURGEON.

(*Continued from page 265.*)*

V.—*Staphyloma Cornæ; Ablation; Cure.*—I am glad to be able to present for Dr. Hinton a brief account of one of the cases spoken of in the former part of this paper. It is a case where the staphyloma was simply excised. The patient was a German girl—Sophia R., æt. 4. The staphyloma was very prominent. No accident occurred during or after the operation. The child was not seen until ten weeks had passed. The eyeball is of natural size, the cornea replaced by a dense white cicatrix. There was no irritation about the eye, and no intention to wear an artificial eye. The mother appeared satisfied to have the unpleasant prominence removed.

What will determine the choice of operations in cases of staphyloma corneæ?

First, as to Iridectomy. This is done when the purpose is to retain the natural eye, the deformity being abated or removed. The other operations are usually intended as preparatory to the wearing of an artificial eye. All that iridectomy can do is to diminish excessive convexity, while it can effect nothing in removing opacity of the cornea. This latter condition, the whole cornea being deeply white, is sometimes so offensive as to lead patients on this account to seek extirpation of the globe, and the substitution of an artificial eye.

What cases can be relieved by Iridectomy? First, when the staphyloma is recent, or is in process of formation. One of the cases adduced is of the latter class. There may be considerable congestion of the sclerotic present, as also pain and lachrymation. To relieve these symptoms and restrain the advance of the cornea, paracentesis may be performed, and several times repeated. When a few trials have shown the relief to be but temporary I would at once resort to iridectomy. The place where the excision is to be done will be determined by the state of the cornea. If there be any transparent substance left, the opening in the iris should be made opposite to this spot. If there be no such chance of improving vision, the iridectomy is most easily done on the temporal side of the cornea. The existence of a certain amount of inflammation does not contra-indicate the operation; the wound will increase the inflammation to a moderate extent, but the cornea will at once be made flatter as the effect of diminution of intra-ocular pressure, and so soon as the wound is well healed the general congestion will rapidly abate. The complete flattening of the cornea is not attained at once. It becomes more and more apparent with the disappearance of hyperæmia. Its texture gains firmness, and the inflammatory action subsiding, serous effusion within the globe ceases.

Secondly, Iridectomy in *partial* staphyloma corneæ, of long duration. Here the cornea has adjusted itself in some degree to the amount of pressure behind it, and the prominence may be stationary. There will be no considerable congestion or other acute symptoms. There may or may not be adhesion of the iris to the projecting point of the cornea. For these cases iridectomy is a grateful resource, because it offers alleviation when no other effectual operation could be the alternative which would not incur risk of severe inflammation, or sacrifice the eye. The operation neatly done, does not, in those cases where no congestion remains, occasion any serious inflammation. Within ten days the eye will be quite recovered. The effect of the operation is not so decided in these as in recent and advancing cases. The cornea has adapted itself to its abnormal condition. The improvement will be more gradual; and when the full benefit of one operation has been attained, I would not hesitate to do it the second time, after the lapse of some months.

Iridectomy is not suited to the reduction of very large or old staphylomata. One case quoted above went amiss, partly because of accidents during and after the operation, and partly because the wound in the sclerotic was a little too far distant from the cornea. On this point it is to be observed, that the exact situation of the wound is a matter of nicety. The full benefit of iridectomy is to be obtained only when the section of iris is removed quite up to the ciliary edge. To do this the knife must pierce the sclerotic, and its point enter the anterior chamber at the pillars of the iris. It is also desirable to go through the sclerotic with as little obliquity as possible. The knife may, by thrusting it quite slantingly, be made to enter the anterior chamber when the point has been placed on the sclerotic two lines distant from the cornea. This was done in the case referred to. But it was found afterwards that the tips of the ciliary processes had been mutilated. The annoying bleeding during the operation may have partly been due to this cause. The true distance of the wound from the cornea should be one line; the lance knife should be carried almost perpendicularly into the anterior chamber, and when its point is seen to have entered, its direction may be slightly changed so as to keep in a plane parallel to the iris. The breadth of iris removed always corresponds to the size of the inner edge of the wound: the length of wound should be about one-quarter of an inch. I may remark, that the successful treatment of staphyloma of the cornea by Iridectomy proves the possibility of thus diminishing intra-ocular pressure, and furnishes an argument to those who have been unable or unwilling to believe that iridectomy could be of any benefit in treatment of glaucoma.

When the globe is too much deformed to be thus relieved, and an artificial eye is desired, the question arises, shall abscission of the staphyloma or extirpation of the eye be chosen? In balancing the risks and advantages of these two operations, in far the greater number of cases my mind preponderates to the latter. The argument may be thus stated:—Dangers of abscission are, severe inflammation of the stump of the eye, from choroidal hæmorrhage, or by the simple exposure of the interior of the eye. The usual result of inflammation is suppuration of the eye, which will reach a quiescent termination after the lapse of weeks or months. Dangers of extirpation none worth mentioning. I have never seen anything more serious than simple conjunctivitis ensue, and the healing of the wound is attained within a fortnight, and sometimes within a week.

Advantage claimed for abscission is, that a better stump is furnished for the lodgment of the artificial eye; the superiority consisting in the greater prominence of the eye, and consequently the more perfect raising of the upper lid. No especial advantage can be claimed of greater mobility of the artificial eye, for there is no perceptible difference

* ERRATUM.—In the last number the second paragraph on page 265, commencing, "The younger the child, etc.," should have appeared under the head of Dr. Voss's remarks on Tracheotomy in Croup, as the first paragraph, in place of the two commencing "As a measure of humanity, etc.," which in turn should read Dr. Noyes's article. By bearing this mistake in mind the reader can, without difficulty, follow on the conclusion of these articles in the present number.

whether a portion of the globe remains or not. When none remains, the ends of the muscles adhere to each other by a mass of granulations which acts as a button for common attachment, and sufficient point d'appui of movement.

The objection of sinking of the artificial eye after extirpation does obtain in certain cases. These are in such persons as have prominent eyeballs, and in young subjects, especially girls with well rounded forms. On the other hand, in those adult subjects where the upper lids are freely wrinkled and loose, and where the supra-orbital ridge and eyebrows are prominent, there is absolutely no preference to be given to abscission on the score of its leaving a better stump and giving greater prominence to the artificial eye. Another consideration bearing strongly in favor of extirpation is, that the remaining stump of the globe is often intolerant of the pressure of the glass capsule, and becomes inflamed. This stump is also not incapable by continued chronic inflammation of giving rise to sympathetic irido-choroiditis of the opposite eye. I have been called upon to remove such a stump, which by bearing an artificial eye became inflamed, and demanded extirpation.

The conclusion is, that in cases of progressing, of recent, and of partial staphyloma corneæ, Iridectomy is to be chosen; and that enucleation of the globe is, in the great majority of cases where an artificial eye is desired, to be preferred to ablation of the staphyloma.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, March 26, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

BRIGHT'S DISEASE WITHOUT ALBUMINURIA.

DR. AUSTIN FLINT, in relation to the subject of contracted kidney, under discussion at the last meeting, stated that during the present and last winter he had met with five cases of this particular variety of Bright's disease, in all of which, with one exception, albumen existed in the urine.

HYDRO-PNEUMO-THORAX WITHOUT SYMPTOMS; PNEUMONIA; DEATH.

DR. FLINT next presented a portion of lung, for which he was indebted to Dr. Burge, of Brooklyn. It was taken from a patient who was seized with an acute affection of the chest four days previous to death. Dr. Burge saw the case in consultation. When seen by him the symptoms had reference to the right side of the chest, where pneumonia of the lower lobe existed. Extending, however, the physical examination to the left chest hydro-pneumo-thorax existed, as was evinced by tympanitic resonance at summit, and flatness at base, and the existence of amphoric voice, amphoric respiration, and metallic tinkling. On finding the existence of hydro-pneumo-thorax, and there having been no rational symptoms pointing to that disease, every inquiry was made with reference to the previous history of the case. The patient at first stated that he was well up to the attack of pneumonia, but on close questioning it was ascertained that he had had a slight cough, with expectoration for a year or more. He never, however, had occasion to complain of want of breath on exercise, and attended to his business, that of an accountant, without being aware of the existence of any disease whatever.

Autopsy.—On examination after death the right lung was found the seat of pneumonia in its lower lobe. On opening the left side of the chest there escaped a considerable quantity of inodorous gas, and the rest of the cavity contained about a quart of turbid liquid. The lung was compressed into a hard solid mass. About the middle of the upper lobe there was apparent an aperture about the size of a crowquill, which was gaping, and appeared to be surrounded by a rim of cartilaginous substance. On inflating the organ through its bronchus air escaped readily through this opening. The pleural surface of this organ was also covered with patches of lymph, some of which were of considerable thickness and firmness. The aperture was found to communicate with a cavity, irregular in shape, about the size of a hickory nut, and lined with a pyogenic membrane. In the right lung were found several deposits of tubercle, and also several cavities of considerable size.

The interest of the case consisted in the presence of hydro-pneumo-thorax for an indefinite period without giving rise to any inconvenience. In this respect a case of hydro-pneumo-thorax reported at a previous meeting bore some similarity; the patient being most of the time, while suffering from the disease, able to get about the ward without much inconvenience.

DR. POST asked how many such cases Dr. Flint had seen recover.

DR. FLINT had not met with a single instance in which the disease had been borne more than several months

DR. POST had seen one case where the patient survived several years.

RUPTURE OF GLOBE, SECONDARY INFLAMMATION, EXTIRPATION, ETC.

DR. NOYES presented two eyes, which he had removed during the last week. The first belonged to a patient who in January last received an injury of one eye by a stroke from a piece of wood which he was splitting. Rupture of the globe was thus produced, causing immediate loss of sight, and subsequent severe acute inflammation. He came under observation shortly after the reception of the injury, but, living in the country, he soon returned home. Having been warned that in case any difficulty with the other eye should show itself he should at once present himself for treatment, he again showed himself at the end of two months and a half. It was then found that the injured eye had shrunken, was tender on pressure, and that there was also supra-orbital pain. The left eye presented the symptoms of acute iritis, which had existed for a week, but was not attended with any considerable effusion of lymph, but mainly turbid serum. He was advised to have the injured eye removed, which advice he abided by. It was then found that besides the marks of external injury there was a considerable clot of blood which had penetrated into the vitreous humor.

The day succeeding the operation he found that he could see better with the remaining eye, and within three days the evidences of iritis all disappeared.

WOUND OF EYEBALL, EXTIRPATION, ETC.

The second eye was removed from a young blacksmith aged 19. While at work, and holding a chisel, which was being struck by another, a small splinter of iron penetrated his left eye. He presented himself for treatment the following day (Saturday). The eye was then in a state of incipient inflammation, and a wound appeared about three-eighths of an inch in length, beginning at the middle of the cornea, passing downwards and inwards, encroaching somewhat upon the sclerotic. The iris was slightly prolapsed; the pupil was unchanged in form, but the crystalline lens was drawn forwards towards the lower portion of the eye. There was only visible a little laceration of the fibres at the upper portion of the iris. It was difficult to tell whether or not the foreign body had lodged in the substance of the organ. The direction of the missile could not be made out. The patient was advised to be quiet and return again on Monday. At the second presentation he was suffering from abundant inflammation of the deep structures of the eye; chemosis was very abundant, pain very intense, and injection of the eye very marked. Dr. Noyes then determined to put the patient under chloroform, and if possible extract the foreign body. In the event, however, of not being able to do so, it was understood by the sufferer that the whole globe should be extir-

pated. The body was so deeply situated that extraction was impossible, and accordingly extirpation was proceeded with. A chip of iron one-quarter of an inch in length, three-eighths of an inch in width and thickness, was found to have passed through the cornea, iris, and lower margin of the lens, burying itself in the vitreous humor.

MELANOSIS OF ORBIT.

Dr. Post presented a mass of melanotic cancer which he had removed from the orbit of a woman, æt. 30, whose eye he had extirpated some few months since, affected with the same disease. That specimen was at the time also exhibited to the society, the growth being both within the eyeball and behind it, with no communication between the two portions, except by the optic nerve. The patient remained well for three months, when a second growth made its appearance, and increasing very rapidly in size was also removed.

NEUROMA.

Dr. Post also presented a neuroma removed from the ulnar nerve of a man aged 40 years. The tumor first made its appearance when the patient was twelve years of age, since which time he had been subject to constant paroxysms of pain, whenever the swelling was touched, it being quite tender. There was also numbness of all those parts supplied by the nerve. By the removal of the tumor the patient was entirely relieved of the paroxysms of pain, though at the end of a fortnight the numbness referred to still existed.

CHRONIC MAMMITIS SUCCEEDED BY CANCEROUS DISEASE.

Dr. Sands presented a cancerous tumor with the following history:—A lady, 40 years of age, the mother of six children, with no hereditary predisposition, considered herself in the enjoyment of perfect health up to last May, when she weaned her young child. Shortly after she noticed a small swelling in the right breast, which, however, being painless, did not attract her serious attention until it began to increase in size, when Dr. Parker was consulted about it. This was last October, and he advised its removal. The operation was performed on the 11th of October last. The tumor occupied the substance of the right half of the gland, towards the pectoral muscle. The nipple was not retracted, neither were there any enlarged lymphatic glands in the axilla. The wound made by the operation was healed by the 11th day.

A very careful microscopical examination of the tumor was made immediately after its removal. Although presenting many of the gross appearances of scirrhus of the breast, Dr. Sands was surprised to find no microscopical evidences of that disease. The normal structure of the breast existed, with the addition of a large quantity of plastic material, which gave rise to the supposition that the disease was the result of simple chronic inflammation of the breast. The husband was accordingly assured that there would be no liability to the return of the disease. On the 24th instant, however, a second operation was performed, which consisted in the removal of the tumor presented. Two months previous to the operation this lady noticed a swelling in the axilla, and she was advised not to have it removed until it began to grow quite rapidly. A few days before the operation she noticed a small tumor on the inner side of the cicatrix of the former operation. Both these masses were removed, and were found on microscopical examination to be unquestionably cancerous in character. Dr. Sands had met with but few instances of this kind; viz. cancerous disease of breast following upon simple chronic inflammation of that organ. He alluded, in conclusion, to the fact that inflammatory tumors of the breast were identical in microscopical composition with many of those of a malignant character in the interior of the body.

(To be Continued.)

SURGICAL SECTION.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, March 28, 1862.

DR. JAMES R. WOOD, CHAIRMAN.

(Reported by J. P. GARRISH, M.D., Secretary.)

TRACHEOTOMY IN CROUP.

*(Continued from page 266.)**

Of very great influence on the success of the operation, is the bearing which the medical treatment, before the case presents itself for tracheotomy, has had on the vital forces of the child: if it is weakened by bloodletting, calomel, blisters, emetics (principally antimonial, a method of treatment by the best authors now generally condemned), the operation is less promising.

The complication of croup with general diphtheritic intoxication is, by most authors, considered as excluding the final success of the case; but Dr. Barthez refusing on this principle an operation, and finally against his own conviction, operating at the instance of two of his colleagues at the Hospital St. Eugenie, saved the child.

The cases of secondary croup occurring during or immediately after scarlatina or measles, were considered by Trousseau as absolutely contra-indicating the operation. I have not found in literature a case of croup after scarlatina operated on with success. But my fifth case was a boy attacked with croup subsequent to scarlet fever. I operated; the wound became very soon diphtheritic; but the boy was relieved, and exhibited every prospect of final recovery. The wound was nearly closed, his appetite was good, he walked round and played even out of doors, but he died thirty-one days after the operation from anæmia; the post-mortem examination having been very carefully made, and disclosing no lesion of any kind. I would not hesitate to consider myself justified in repeating the operation in a similar case. Of croup after measles, successfully operated on, Millard, in his "Thèse" on tracheotomy in croup, cites three cases. According to this same author, the complication of hooping-cough or chronic bronchitis with croup would be rather encouraging to than forbidding the operation. Of more frequent occurrence and, therefore, of more importance, are the complications of laryngeal croup with pneumonia, acute bronchitis, and bronchial croup. All such cases were considered formerly by Guersant as absolutely unfit for operation. But now the record of several successfully operated cases, refuting the generality of his opinions, at least in regard to bronchial croup and pneumonia on one side, are not very scarce, so that now only *bilateral* pneumonia would give no prospect of a successful operation. Another circumstance still enhancing the importance of these complications of croup with affections of the lungs, is their difficult diagnosis during the complications with croup. Auscultation, in a case of confirmed croup, is utterly useless, and percussion, as experience has shown, treacherous. The respiratory motion of the thorax and abdomen, and the celerity of the respiration, are the only signs of value in the appreciation of these complications. As to the action of the respiratory muscles I was of opinion that the very marked reaction of the lower end of the sternum and inferior ribs, and the jugular fossa accompanying each inspiration, indicated the lungs free from pneumonia and bronchitis; now I know that bronchitis is not excluded by the above-named symptoms. In regard to the number of respirations, I am led from my own observations to state, that the more frequent and short the respiration is the less chance is there for a favorable result of the operation. The quality and frequency of the pulse I must consider as worthless in relation to the prognosis of the operation.

* ERRATUM.—In the last number the second paragraph on page 265, commencing, "The younger the child, etc.," should have appeared under the head of Dr. Voss's remarks on Tracheotomy in Croup, as the last paragraph, in place of the two commencing "As a measure of humanity, etc.," which in turn should end Dr. Noyes's article. By bearing this mistake in mind the reader can, without difficulty, follow on the conclusion of these articles in the present number.

As children tracheotomized for croup require a very careful and unusually frequent and assiduous attendance, the possibility of such care should not be overlooked in calculating the chances before the operation. Operations in hospitals, therefore, promise better results than those in general practice or in villages. Prof. Roser, in Marburg, transports, therefore, croupy children from the country villages to his hospital in the city—and, as his statistics show, with the most satisfactory results.

In regard to the time when the operation should be performed "doctors differ." Some postpone the operation as much as possible and undertake it only "in extremis," and in consequence have less favorable results than those operating earlier. Trousseau himself operated in the beginning "as early as possible;" at a later period he left the early-as-possible doctrine, without however defining clearly the period when he operated; and still later, quite recently he prefers again early operations. The impossibility of defining clearly the time when to operate, is obvious. Beginning asphyxia seems to me the proper moment; the younger the child the less likely will it bear dyspnœa, or recover from it, after having been for a certain time subject to it. The moment when the children present a livid-red face, hot skin, and extreme restlessness, is the best time; later they being pale, their skin cooler, in a word more soporous, the prospect of a good result after the operation diminishes in exact proportion to the length of time the child is so affected. But very often, only too often, the surgeon has no choice of the time for the operation; from whatever cause the performance of the operation may have been delayed till the patient is actually in extremis, under otherwise favorable circumstances, especially if the case is one of pure laryngeal croup, uncomplicated, a favorable issue can be hoped for, and the operation ought to be performed.

The anæsthesia of the skin, partial or general, as a consequence of oval cyanosis, by Bouchut considered as an indication to hasten the operation, is by no means constant. I am inclined to consider it rather an exceptional symptom, and therefore worthless in regard to the question of the time of the operation. Never did a case occur to me, where having proposed to operate and being refused, the child nevertheless recovered.

The operation being resolved upon, the question arises—Can we use chloroform, and is there any benefit, without danger, in its use? Considering the operation a short one and not very painful, the respiration already impaired to such a degree that the inhalation of anæsthetics seemed dangerous, I have not used chloroform in my first operations; but encouraged by the record of cases in which it was used with benefit by others, I have used it in my later cases, and intend to continue its use, having seen no ill results whatever from its use, and the operation being very much facilitated by it. The recovery from the influence of the anæsthesia in these cases, seemed to me more than commonly protracted, but in no manner alarming. I regret not being able to state the name of the surgeon who first used chloroform in these cases. Dr. Voss then gave a short description of the anatomical features of the operation, which, however, differed in no essential particular from his published views in the journal referred to.

The section then, on motion, adjourned.

Dr. William Sloan, U.S.A., late Post Surgeon on Governor's Island, has been appointed chief medical officer of all the general hospitals for sick and wounded soldiers in and around New York. Among other duties which devolve upon the chief medical officer is that of giving certificates of disability to such soldiers as, in his judgment, should be discharged. Dr. Joseph P. Wright, Assistant-Surgeon U.S.A., succeeds Dr. Sloan as Post Surgeon at Fort Columbus.

Brigade-Surgeon.—Dr. John W. Hunt, of N. Y., has been appointed Brigade-Surgeon.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

ON THE EXTERNAL USE OF THE SOLUTION OF THE PERNITRATE OF MERCURY.

Dr. John Gay, Surgeon to the Great Northern Hospital, reports in the *British Medical Journal* a number of cases of epithelial cancer, lupus exedens, and indurated chancre, which he has successfully treated by the external application of the solution of the pernitrate of mercury. The first case reported was epithelial cancerous growth on the lower lip, occupying the whole of the edge, but had not extended to the junction of its mucous membrane with that of the jaw. Towards the left corner it had grown to the size of a large walnut, and the surface had ulcerated, exuding a thin and slightly offensive discharge. It had been in existence about a year and a half, and was growing steadily. The solution of the pernitrate was applied abundantly over the whole ulcerated surface, causing great pain for an hour or two, but having the effect of destroying a layer of the diseased growth, which came away as a slough on the third day. The surface was soaked with the solution twice a week for a period of six weeks, with the same result after each application. "As it destroyed layer after layer of the cancer, so the wound deepened; but at the same time the adjoining tissues closed in by granulation from every point of healthy tissue, as this was stealthily reclaimed from the invasion of cancerous growth, until at length, *even under the continual application of the agent*, the whole surface threw out healthy granulations, and the wound healed with scarcely a mark, and without loss of healthy structure." Another case is reported in which excision was followed by a fungoid excrescence, which discharged blood and thin pus, and grew rapidly. The solution was applied in the same manner, and with the same result as in the previous case—the healing edge keeping close up to the limits of the diseased growth, and following it as this gave way to the action of the caustic, until cicatrization became complete, and the patient was discharged well. The value of this agent is, that it destroys the disease, while it not only spares, but appears to quicken the healing energies of the healthy tissues; so that no sooner is the disease gone, but the wound is almost cicatrized, and that without the loss of tissues sustained by excision. The same success attended its employment in treatment of lupus exedens, though it did not seem to destroy the tissues with which it came in contact as in epithelial cancer, owing perhaps to its not being applied so vigorously, or to the greater resistance shown by the lupous tissue, which differs from cancer in consisting principally of newly formed connective tissue, with nucleated cells. In removing the induration of chancre, he has derived benefit from combining the internal use of mercury with the topical application of the pernitrate; but care should be taken to continue it only until the wound shows unmistakable evidence of healing, for the cicatrix has a peculiar induration resembling that of the diseased tissue, and cannot be got rid of.

ON THE TREATMENT OF VARICOSE ULCERS OF THE LEG WITHOUT REST.

In a paper read before the Midland Medical Society, by J. H. Houghton, Esq., Surgeon to the Dudley Dispensary, the writer advocates the use of the flannel bandage suggested by Mr. Hunt in 1857. Since adopting this treatment he has been able to manage without difficulty, cases which he had before looked upon as next to incurable; and to effect a speedy cure without confinement, or the patient's relinquishing his usual occupation. His general course is to strap the wound with a few strips of soap-plaster; or dress it with some simple dressing, or water dressing, and apply the bandage by first making "one turn round the bottom of the leg, then one under the sole of the foot, over

the instep, and round the back of the foot (keeping the edges of the roller as low as possible), and then again over the instep, till the lower edge of the bandage passes round the foot at the root of the toes, about two turns round the foot, and then spirally up the leg to the knee." He says the roller naturally follows this course, and will not require a turn till it reaches the calf; and moreover, if properly applied, it will lie quite even and remain immovable for an indefinite period. He reports four of the most aggravated cases treated in the Dispensary during the past four years, all of which were cured *without rest*. In one case the patient walked nine miles every time she had her leg dressed (twice a week), and during the whole time stood at her work many hours a day. She was anæmic, and took quinine and iron during the treatment, which occupied just over a month. In the second case six angry ulcers, varying from the size of a shilling to that of the palm of the hand, were cured in eighteen days, the patient following her usual occupation the whole time. In the third case, an angry granular ulcer, larger than the palm of the hand, with indurated raised edges, and of five years' duration, yielded to treatment in five weeks. The fourth case was a large varicose ulcer, four inches by three, deep, covered with an ash-colored secretion, surrounded by elevated granular edges, very painful, throwing off an ichorous discharge, and which had existed thirty years. The leg was strapped with soap-plaster, and rolled. He took sarsaparilla and iodide of potassium three times a day, and opium night and morning. The patient walked twelve miles every time his leg was dressed, followed his occupation as gardener throughout the treatment, and was perfectly cured in eleven weeks. The advantages of flannel over calico for the bandage are, that it is sufficiently elastic to give uniform support, and sufficiently rough to prevent it from slipping and getting displaced. It is advisable for the patient to sleep with a thin stocking over the roller to prevent its being kicked off in bed. He mentions having used a material called "domette" during the past year, which he thinks preferable to flannel, in being much lighter, sufficiently strong and elastic for the purpose, and about quarter the price. The roller must be accurately made, and in one piece. He gets eight yards of domette, has it washed, and cuts the rollers, measuring the width of each (two and a half inches) accurately with a rule. In this paper Mr. H. does not pretend to offer any new principle, but to show the results of a mode of applying an old principle not generally practised. The views contained in this paper are corroborated by J. K. Spender, Esq., and J. H. Crisp, Esq., in the *British Medical Journal* of Feb. 1. The former gentleman says the ulcers will yield still more quickly by using a more soothing application than soap plaster. He recommends an ointment containing a large quantity of an alkaline earth (as chalk); spread thickly on lint it forms a protection to the sore, and neutralizes the foul secretion which often flows from it. He also recommends the compound lead plaster of the Pharmacopœia. Mr. Mitchell, of the Lancaster Infirmary, gives to the readers of the *Lancet* the following directions for treating old indolent ulcers:—First wash the leg well, after which fill the excavated ulcer with finely powdered carbonate of iron, and apply a large linen pad, without allowing any moisture to come near; then envelop the whole limb in a starched bandage, allowing it to remain three weeks or so, according to the extent of the ulcerated surface. The patient need not be confined to bed, but may walk a little every day.

Volunteer Surgical Corps from Connecticut. — The following medical gentlemen of Connecticut have volunteered their services to the Government:—New Haven, Drs. P. A. Jewett, S. G. Hubbard, J. B. Townsend, C. A. Lindsley, L. J. Lanford; Waterbury, P. G. Rockwell; Bridgeport, Robt. Hubbard; Westport, D. S. Burr; Stratford, R. C. McEwen; New-London, R McLeod; Norwich, C. M. Carleton, A. B. Haile; Franklin, A Woodward; Hartford, E. Brumley, P. W. Ellsworth.

American Medical Times.

SATURDAY, MAY 17, 1862.

FINALE OF SWILL MILK.

In a recent number, we had to condole with our readers upon the failure of the passage of the Metropolitan Health Bill; let us at present rejoice in the passage of a law "*to prevent the adulteration of Milk, and prevent the traffic in impure and unwholesome milk*," which passed April 23d, and has since received the signature of Governor Morgan.

It will not be forgotten by our medical readers that the New York Academy of Medicine has for several years shown an earnest and active interest in this matter, and it is undoubtedly by their exertions, and the facts that they have so forcibly and prominently brought forward, that the present Legislature have seen things in such a light as to frame and pass the present stringent law. We have further to rejoice at the passage of this law, because it gives us great hope for the future in the passage of other necessary sanitary legislation. The most ardent enemy of Swill Milk, not even Dr. Percy, could have asked for no more stringent law to suppress this unwholesome traffic; and yet, last year, a bill introduced by Senator Rotch, that was mild in all its features in comparison to this, was rejected by the Legislature. Let those who are friends of Sanitary Reform take courage from this fact, and rest assured that so soon as they can educate the public mind to the proper point, they will not be baffled in their endeavor to secure life and improve health, even by all the money and political influence of the City Inspector's Department.

The history of the agitation of the Swill Milk question will interest our readers. As early as 1841, Mr. R. Hartley published a very excellent little volume of some 200 pages, entitled "An Essay on Milk;" but as the work was the first step in Reformation the author could hardly hope that his zeal and labors, meritorious and philanthropic as they were, could produce the results that he desired. In 1847, the New York Academy of Medicine appointed a committee to examine into and report the effects of this swill milk upon the public health. This committee made a short report, which was published in the Transactions of the Academy. Several minor articles from time to time appeared in the public newspapers, pointing out to the community the enormous quantity of this swill milk that was sold, and its injurious effects upon the health of children using it. In 1858, Mr. Frank Leslie exposed this most nefarious traffic to the ocular inspection of the community by means of his admirably illustrated newspaper. Here the public saw for themselves accurate drawings of the stables and of the poor stump-tail brutes confined within them, with all their unhealthy sores, filthy condition, and crowded state. These investigations and exposures by Mr. Leslie created such excitement that the Board of Health convened to investigate the matter; and although they made it a political question and refused to interfere to suppress the traffic, they, on the 7th of June, 1858, "Resolved, That the Academy of Medicine be requested to lay before the Board such facts and evidence

as they may have in relation to the milk furnished to our citizens." At this request, the Academy of Medicine appointed a committee, the various members of which visited the different stables in and around the City where swill was fed to cows. They were accompanied in their visits by Mr. Solon Robinson as judge of the quality of the cattle kept, and by Mr. P. F. Devoe as butcher. After some months of labor this committee presented a Report to the Academy confirming in the most positive manner the unhealthiness of the animals and of the milk. This main report is short, but filled with facts, and refers the Academy to a separate report made to the committee by Dr. S. Percy. This report of Dr. Percy's is more than could be expected of one individual, and shows untiring energy, perseverance, and industry; taking up the matter as though no previous investigations had been made, he commences *ab initio*, and goes through every branch of the subject in regular order. From the stables he goes to the influence of the atmosphere within them upon the respiration and health of the cows; he makes experiments upon the temperature, the dew point, and the chemical composition of the atmosphere of the stables, and proves that no animal in such confinement could be healthy. He next takes the temperature and analysis of the swill upon which the cows are fed, and shows its composition, and how utterly unsuitable it is for the support of animal life; that the process of distillation has rendered it deficient in the elements that are essentially requisite, and that in addition acetous fermentation and putrefactive decompositions have formed vinegar and other substances that are slowly poisonous. Many minute chemical analyses are then made, pointing out distinctive differences between it and country milk. A lengthened table of these analyses is given which alone would have occupied many investigators more than the time expended upon the whole report; and in addition to these there are analyses of milk from drunken women and from those living in damp and dark basements. An analysis of the butter is also given, which proves it deficient in some of the most essential components. From these facts Dr. Percy then proceeds to trace the effects of this swill milk upon the health of many children using it, and he proves from numerous cases that a frightful mortality results from the use of such milk, and shows that death frequently takes place from its use, and points out some of the post-mortem appearances. Before the publication of this Report of Dr. Percy's, we had but little that could be called facts to guide us; assertions were made as to the unhealthiness of the milk, which were stoutly denied by the producers of the article. Now, we have exact and scientific data, which are conclusive, and upon which further investigations can be made.

The observations and deductions made by those who preceded Dr. Percy were, in the main, correct; and the delineations of Mr. Leslie, horrible as they were, fell very short of the truth; but all failed to *prove* that sickness and mortality were caused by the use of this "swill milk." In Dr. Percy's Report the existence between cause and effect was most plainly and incontestably demonstrated, and disease and death were proved to have been caused by the use of this article, and health was restored by mere abstinence from it. We have dwelt, therefore, upon this report, because it furnished the facts that were needed to enable our Legislators to frame the present law, and because it contains nearly all that we require to successfully carry the law into operation.

We have dwelt some little time upon this subject, feeling that it is an important one in a sanitary view, and knowing that with the passage of the present law it must be again brought before the attention of the profession. At the last meeting of the Academy of Medicine the law, which we have given in a previous number, and which we will again give below, was read, and a committee of three was appointed to consider what action was necessary to be taken by the Academy on the subject. This committee consists of Drs. S. R. Percy, W. Parker, and I. E. Taylor.

It is already understood that opposition is to be made to this Bill, and it behoves every member of the Academy to use all his influence to cause it to be promptly obeyed, and to sustain their committee should they bring forward some feasible plan to abate the nuisance. The last report made by the Academy at the request of the Board of Health, has never yet reached that body, and still quietly rests in the hands of ex-Mayor Tiemann, who, as President of the Board of Health, received the report, but never called the Board together: it will be well to recollect this fact, that when the Board again meets it may be presented to them. The whole report is printed in the 2nd Vol. of the Transactions of the Academy of Medicine, Part 4.

We have no doubt that we shall have occasion again to call the attention of the Profession to this subject, and we wish that each member would study the matter so that he may present further facts and evidence, when they are needed. What we now principally need, are philanthropic and influential individuals who will lend every assistance in their power to enforce the law, for we cannot expect the law to be generally observed unless somepersons will give it their personal attention.

We would remind our readers that the public are indebted for this bill to Mr. E. Corneli, who reported it from the Committee on Agriculture.

An Act to Prevent the Adulteration of Milk, and prevent the traffic in impure and unwholesome Milk. Passed April 23d, 1862.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Sec. 1. Any person or persons who shall sell or exchange, or expose for sale or exchange, any impure, adulterated, or unwholesome milk, shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than fifty dollars, and if the fine is not paid, shall be imprisoned for not less than thirty days in the penitentiary or county jail, or until said fine and costs of suit shall be paid.

Sec. 2. Any person who shall adulterate milk with the view of offering the same for sale or exchange, or shall keep cows for the production of milk for market, or for sale or exchange, in a crowded or unhealthy condition, or feed the same on food that produces diseased or unwholesome milk, shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine not less than fifty dollars, and if the fine is not paid, shall be imprisoned for not less than thirty days in the penitentiary or county jail, or until said fine and costs of suit shall be paid.

Sec. 3. Any person or persons who shall engage in or carry on the sale, exchange, or any traffic in milk, shall have the cans in which the milk is exposed for sale or exchange, and the carriage or vehicle from which the same is vended, conspicuously marked with his, her, or their names, also indicating by said mark the locality from whence said milk is obtained or produced, and for every neglect of such marking, the person or persons so neglecting shall be subject to the penalties of the foregoing section of this Act. But for every violation of this Act, by so marking said cans, carriage, or vehicle, as to convey the idea that said milk is pro-

cured from a different locality than it really is, the person or persons so offending shall be subject to a fine of one hundred dollars or imprisonment in the penitentiary or county jail, or both, at the discretion of the Court.

Sec. 4. This Act shall take effect immediately.

THE WEEK.

The *Lancet*, in speaking of the prevalence of fever in the houses of the rich, refers to the views of Mr. Rigby, a practical builder, upon the subject.

"In the first place, we arrange our water-closets in such a way with each other, that any evil in the one soon puts its neighbor out of order also. Where two closets exist—an upper one for the females, and a lower closet for the servants—they are generally made to communicate with each other by the soil-pipe (being placed one under the other); and by the same means the upper cistern is connected with the lower cistern, the overflow of water being brought into the lead-trap and into the soil-pipe by a waste-pipe. In the second place, we misuse our water-closets. Instead of keeping them for the one purpose for which they are intended, they are used by servants as a common receptacle for all sorts of refuse and slops from the nursery and bed-rooms. Thus arise defects in the uniform working of the traps and pipes of the upper closet. In the third place, the lower closet is generally supplied with water from a cistern in the kitchen or scullery, furnished with waste-pipes, sinks, etc., all communicating with drains attached to upper closets. This cistern is used for domestic purposes, and supplies the water for the breakfast and tea-table, and for culinary operations generally. In some cases its water is even drunk without being submitted to the process of boiling. If all this be true—and personal knowledge warrants us in affirming it to be so—it is at once apparent how severe may be the effects produced upon the health of a whole household simply from an imperfectly acting valve in an upper water-closet. However, from this constantly occurring combination of evils, we have, upon the one hand, foul soil-pipe and sewer-air escaping through the sink and water-pipes into the nursery and bed-room floors, and into the cistern from the air-pipe at the back of the closet-basin. Upon the other hand, the water of the cistern, poisoned by the confined air, descends below, and acts with double force, rendering impure not only the air, but the water also, in all parts of the house. In a very great majority of houses we believe it to be the case that the water-closet pipes communicate with cisterns used for domestic purposes. Furthermore, in many dwellings the presence of a wash-hand basin and plug in the bed-room, with a pipe beneath introduced into the soil-pipe to carry off the waste water, adds to the evil by permitting of the escape of foul sewer air into the sleeping room."

—

The New York Ophthalmic Hospital was removed on the 1st inst. from 63 3d Avenue, to the corner of 4th Avenue and 28th Street. The building has been fitted up specially for the purpose, and is now ready for the reception of patients. The location, being in the immediate vicinity of the Medical Colleges, is such as to offer increased facilities to medical students who desire to study diseases of the eye. The hospital is open every Monday, Thursday, and Saturday, from 1 to 3 P.M. To patients, the charge of board is $3 50 per week. The attending surgeons are Drs. Mark Stevenson, Marcus P. Stevenson, and J. P. Garrish.

—

Fifteen hundred patients from the Military Hospitals at Yorktown and Newbern have arrived in this city during the past six days. Upwards of twelve hundred of these came on board the Hospital Transports of the Sanitary Commission. The plan of removing diseased and feeble men from the military hospitals in malarious and insalubrious districts like that of the Virginia Peninsula, to the healthy regions of the North, was early and urgently suggested by the Sanitary Commission. Twenty-five hundred patients, it is reported, were made over to the Commission by the Military authorities in a single day, and we are informed that in the brief period of about ten days nearly four thousand patients have actually been removed by their steamers. Are the constituted authorities prepared for the reception and care of these patients? Observations during the past week have shown that there is urgent need of greater energy in pressing forward the preparation of proper Hospitals, as well as better arrangements for the disembarkation and distribution of the patients upon arrival. We hope Surgeon-General Hammond will issue a General Order or recommendation upon this subject.

—

We would call the attention of those of our readers interested in surgery, to the ingenious tourniquet, a description of which appears below. It is an instrument which possesses decided advantage over any other of the sort, and deserves at the hands of every one an impartial trial. It is peculiarly adapted to the wants of soldiers, and we are glad to hear that a large number have been ordered for the army.

—

Drs. Willard Parker, Stephen Smith, and Kissam, of Brooklyn, having been ordered to report themselves at Fortress Monroe, left for that place during the past week, accompanied by Dr. N. C. Husted and Robert Watts Jr., as Assistants.

Recent Inventions.

NEW AND IMPROVED TOURNIQUET.

An ingenious tourniquet has recently been devised by Drs. Lee and Lambert of Peekskill, which has been approved by the leading surgeons of the country, to whom it has been submitted. The following description will convey a general idea of its peculiarities:—

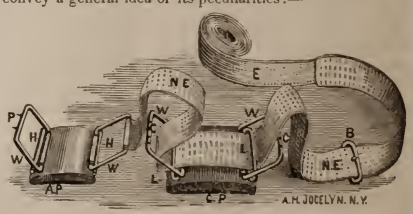


Fig 1.

The small or arterial pad, A P, is to be applied so that the artery of the arm or leg may be between it and the bone; the points for effecting this are indicated by figs. 2 and 3. (In fig. 2, in order to show the smaller pad clearly, it has been represented rather too near the front of the arm, to compress the artery most readily.) The pads, A P, C P, are furnished with wings, W, to prevent the bands holding them upon the limb from tightly pressing it before and behind. Thus the blood is allowed to pass down in small quantities through the small branches of the arteries, and to pass up through the small not only, but some of the large branches of the veins. The wings are attached by hinges, H, to favor compact packing. N E represents an inelastic band, which by one end is attached to the narrower wing of the smaller pad, while the other end, passing over the wings of the other pad, and under its loops, L, and then through a buckle, is attached to the elastic

band, E. The counteracting pad, C P, should be opposite to the arterial pad, A P; hence, C P is movable on the inelastic band, N E.

Fig. 2.

Fig 3.

To apply the Tourniquet, let the small pad be placed with the pointed wing up, and so that the artery will be between the pad and the bone of the limb; slip the large pad on the band, so that its wing nearly touches the wing of the small pad; then bring it up on the limb till opposite to the small pad; then pass the band through the free or pointed wing, P, of the small pad, and draw up the band till snug, where it may be held by the points, or it can be passed through the buckle, and thus fastened. It can be drawn tight enough to arrest the blood by these means alone; but the better way is, to merely draw the inelastic snug, and let the points hold it; then pass the elastic band around in the direction shown in Figs. 2 and 3, and fasten the end by tucking it under one of the turns. The power with which the elastic will act, will depend upon its tension. If great power is required, it should be put around, stretched to its utmost; but usually two or three turns, moderatcly stretched, will be sufficient for the desired object.

If the rapid flow of blood will not permit the application of the pads, the elastic alone, wound around, well extended, will always stop all flow, and can be applied in an instant, after which the pads of the same or another tourniquet can be properly applied. In some instances, compressed sponge or a compress may be applied directly to the wound, and confined there with the smaller pad with benefit.

If it is desirable that the surface of the smaller pad should be convex, a common bandage roll can be easily applied and fastened, either across or in the direction of the artery, and by a few turns of the roll each way, an excellent "thumb point" can be formed. But, under ordinary circumstances, the concave surface will be found the best, as it covers more surface, is more sure to include the artery, and to retain the artery compressed. A little practice will enable any person to apply this instrument with entire success and the most perfect satisfaction, as it is readily adjustable to every requirement.

Poisoning from Arsenical Paper.—Four children of a laborer, residing at Limehouse (Eng.), were poisoned recently by playing with paper hangings colored with a preparation of arsenic. They tore off pieces from the wall and sucked the green color off.

THE CONSERVATIVE TREATMENT OF FRACTURES.

By Isidor Glück, M.D.

chief surgeon to the hungarian hussars.

(*From the American Medical Monthly.*)

(*Continued from page* 269.)

FRACTURE OF THE FOREARM.

The carpal bones, the radial margin, and that of the ulna are like the palmar surface of the hand, covered, as you see, with wadding. The whole forearm I now cover with a shirt sleeve cut open, and make some incisions in it, in order to be able to apply the sleeve smoother. The forearm must be bent in the cubitus. The extension must thus be made on the hand, and the counter extension on the under end of the shoulder. The radial margin must look upwards, the ulnar one downwards. The hand must, according to the direction of the broken ends, be abduced inwards or outwards. The palmar and dorsal side of the forearm must be covered with graduated compresses. On these the gypsum splints are applied, and with two layers of transverse strips about six inches wide fastened and extending from the condyles of the upper arm, as you see here, to the fingers. Sometimes the hand must be fixed at an obtuse angle with the forearm, in order to facilitate the adaptation and union in oblique fractures.

FRACTURE OF THE OLECRANON.

The forearm must be completely extended, if the fractured upper end is drawn high upwards, or else the forearm must be a little bent. The upper fragment must be pushed down by means of the fingers, and approximated to the lower end. Wadding should be placed around the upper fragment and the elbow. The *whole arm* is then placed in a cut sleeve of a shirt. A circular compress must be applied above the upper broken end, which thus will be pushed downwards. A gypsum splint is placed on the back part of the upper arm. It must be a hand wide, and long enough to reach from the shoulder joint to the upper broken end. Another gypsum splint, of the length of the *whole arm*, is applied to the inner side. Five or six *transverse strips*, five or six inches wide, fix the splints to the upper arm, elbow joint, and the forearm. As you see the application of the bandage takes but little time.

FRACTURE OF THE CONDYLES OF THE LOWER END OF THE HUMERUS.

The arm must be bent at the elbow, the fractured ends approached to each other by pressure on the olecranon, exerted from *behind* and sideways (internally and externally), on the condyles. The extension should be made on the upper part of the forearm, while bent. The whole upper extremity is placed in a sleeve; its condyles, olecranon, and elbow, are surrounded with wadding. A circular longuette is applied around the elbow joint. One gypsum splint is applied to the back of the limb, as wide as the hand is long; another similar splint on its inner side. Transverse incisions must be made on both sides of the splints, in the region of the elbow joint, in order to fix them easier and smoother. Five *transverse strips*, in double layers, of the same width and length as in fracture of the olecranon are then applied.

FRACTURE IN THE MIDDLE OF THE HUMERUS.

The arm must be bent in the elbow, and extension made in the upper third of the forearm. The same bandage applied as in fractures of the lower third. If the fractured ends are much dislocated, the extremity must be fastened to the trunk as in fractures of the neck of the upper arm.

FRACTURE OF THE NECK OF THE HUMERUS.

The trunk is surrounded by a corset or linen cut in the same way, or the patient is dressed in a linen jacket, with sleeves cut open, or with a vest, &c. A conical pad is placed in the axilla. The injured limb must be abduced from the trunk at an acute angle and surrounded with a

cut open sleeve. The armpit, condyles, and elbow joint are protected with wadding. A strong compress is applied *between the shoulder* blades. An assistant fixes with his hands the trunk and the shoulder blade of the injured side. Another one *bends* the forearm in the elbow joint, and extends the upper arm in its lower third. The surgeon grasps with both hands the *head* of the shoulder, and crowds out the fractured end of the axilla A long gypsum splint, bent at a right angle, and hand-wide, is placed along the back of the limb, from the acromion to the hand; another splint is applied to the front of the limb, reaching from the armpit also to the hand.

Incisions must be made on both margins of the splints, in the region of the shoulder and elbow joints, in order to facilitate their adaptation. The splints must be pressed on the limb and surrounded by five transverse strips in single layers. The limb is then brought near the trunk and fastened to it by means of a strip eight or ten inches wide. This broad strip is covered with narrower strips, three or four inches broad, as in the third bandage of Dessault for the fracture of the collar bone.

If the broken ends are not much dislocated, a single splint in front, or one behind, fixed to the limb, brought near the trunk by transverse strips, is entirely sufficient. I require for the application of this bandage the kind assistance of Drs. P. and D., besides that of Dr. H.; it is, however, not necessary that the assistants should be medical men, and soldiers may do you the same service, although perhaps not so adroitly as our friends here did it.

FRACTURE OF THE CLAVICLE AND OF THE ACROMION.

The trunk and the limb are inclosed, as in fractures of the neck of the shoulder, in a jacket, vest, etc. In the axilla is placed a conical pad, with the obtuse angle upwards. Between the shoulder blades a strong compress. The fracture is reduced by drawing backwards both shoulder blades, and carrying the shoulder backwards, and pushing the elbow from below upwards. In this position, the arm being bent at the elbow, is fixed to the trunk by a broad transverse strip of gypsum bandage. On the fracture is placed a long graduated compress. The whole together is then fastened by Dessault's third (triangular) bandage, made of two or three long transverse strips (three yards long and four fingers wide).

FRACTURE OF THE RIBS AND OF THE BODY OF THE SHOULDER BLADES.

The rump is enveloped as in fractures of the clavicle. Between the shoulders a strong graduated compress is placed, and in the axilla wadding. A broad strip around the rump, from the axilla to the lower false ribs, half a yard broad. Above the clavicles, two strips, painted with gypsum solution and fastened to the transverse belt. Over it another strip, half as narrow and twice as long as the first ones, twice around the trunk. In fracture of one of the first three upper ribs, some strips are carried over both clavicles in the form of a cross. In all this kind of fractures the bandage is applied in the sitting posture. In the preparation of splints for fractures of the upper extremities, the coarse sack linen is doubled or taken three-fold.

FRACTURE OF THE LEG (TIBIA AND FIBULA).

The leg and the foot are enveloped in a stocking cut open along the seam. The *heel* is put in the stocking cut out, and remains uncovered. Around the malleoli, on the dorsum of the tibia, on the hamstrings, in the popliteal space, and on the kneecap, as well as on the dorsal side of the foot, wadding is placed.

With considerable displacement, the extension is made by half flexion of the knee joint, otherwise with extension of the knee. A splint one-eighth of a yard wide, and reaching from the knee to the *heel*, is placed on the back of the limb. Two other splints, three fingers wide, extending from the patella to the toe, are put on both sides of the leg. Both splints are fixed firmly to the leg, and after having been incised in the neighborhood of the ankle, they must be covered with four or five transverse strips. These transverse strips are one-third of a yard wide and applied in double layers. The front splint must be fastened to the back of the foot by two other small transverse strips. The *heel* remains uncovered.

If the broken ends are distant from each other, as often happens in fractures of the leg, it is necessary, in order to accomplish the reduction, to lift the heel, to be able to approximate the lower fragment to the upper fractured surface, or the foot must be bent much inwards, and retained in this position by assistants, until the bandage is hardened; if the skin is irritated by a fragment, or threatened to be pierced, the application of openings (windows) is necessary, in order to be able to examine at will the injured spot.

TRANSVERSE FRACTURE OF THE PATELLA.

The application of the bandage must be made in the half-sitting position of the patient. The knee must be stretched, the injured limb lifted, and the thigh-bone bent in the hip-joint under an acute angle. The whole limb is now enveloped in an old half of a drawer. Wadding must be placed in the regions mentioned at the front of the leg. The upper fragment of the knee-cap must be approximated to the lower one, with the hands as much as possible, and retained in this position by the hands by graduated compresses and (circle tours) rollers. On these are applied in the bend of the knee, two or three layers of transverse strips (three fingers wide) in figure of eight turns. On the back of the limb is also placed a splint five inches wide, reaching from the tuberositas ischii to the heel; it must be fastened with transverse strips to the leg, knee, and thigh.

FRACTURE OF THE LOWER END OF THE THIGH.

Extension while lying on the back. An assistant fixes the pelvis, another one stretches the knee, seizes the foot in the vicinity of the malleoli, and extends it. The reduction is effected by seizing with both hands the broken ends, together with the soft parts. The whole limb must be enveloped, as in the treatment of the fracture of the knee-cap.

One long splint (six inches wide) is placed on the back of the whole extremity, from the tuberositas ischii, extending to the heel, another equally wide splint is put on the front from the groin, extending to the toes. Both are fixed by five or six transverse strips (five inches wide) in two layers. The lower end of the front splint must also be fastened by two or three narrow strips, carried around the back of the foot in eight tours, leaving the heel uncovered.

FRACTURES OF THE UPPER AND MIDDLE THIRD OF THE THIGH-BONE AND OF THE PELVIS.

Extension while the patient is laid horizontally. The pelvis must be fixed firmly by a strong assistant pressing the hip bones to a mattress. The assistant must take care that the crista ilii be laid equally high on both sides. The whole lower extremity of the injured side, and the whole pelvis, must be enveloped in a divided drawers, cut open along the seam. The whole pelvis must then be surrounded by *wide* bandages, covering the crista of the hip bones and the large trochanters. Wadding or hemp must be placed on the malleoli, the back of the foot, around the knee-joint, on the spina cruralis, in the inguinal region, around the trochanter major and the perineum. The extension is made by lifting up the extremity, bent at the knee-joint, and grasping the foot, as is usually done in taking off another person's boots.

A gypsum bandage, the middle and lower part about six inches wide, on the upper, however, somewhat more than seven inches, is placed on the outer side of the extremity; it reaches from the crista ilii to the sole. In different regions, as opposite the inguinal on the knee and foot-joint, it must be incised. A second splint of the same width, reaching from the perineum to the sole, is applied to the inner side. In the groin and on the back of the foot, the splints must not only *touch* each other at their margins, but

also overlap somewhat. The upper ends of the outer and inner splints are fastened to the pelvis by broad transverse strips, which surround the pelvis, once and a half ways, to the extent of four fingers, in two layers, applied like a spica in figure of eight turns. Both splints must be pressed by the hands, and fastened to the thigh and leg by five or six transverse strips of four inches, applied in two layers. The lower end of the splints must be bent *towards* and *to* the foot-sole; strips three fingers wide are fixed to the foot and its back. The heel remains uncovered. The extension of the limb must be continued until the bandage is dry.

If the dislocation of the broken ends is considerable, and the limb much shortened, then instead of a simple bandage, a double transverse strip must be carried around the pelvis in form of an 8. In this case it is also necessary that *one* should fix the splints to the pelvis, while *another* presses at the same time the splints to the back of the foot and to the knee. By this proceeding time is gained, and the bandage drying on those parts, quickly acts like an extending machine, preventing the bones from slipping over each other, and the pelvis from being displaced.

In fractures of the lower extremity, the coarse-sack-linen used for splints must be taken and folded in four, or at least three. Pirogoff's experience is, that in oblique fractures of the upper or middle thirds of the thigh, the bandage cannot be applied so accurately as to answer all desiderata. The manual extension, the fixing of the pelvis *only* by assistants, the lifting of the patient from the bed, in order to carry around him the bandages, and the application of transverse strips around the pelvis and hip joint, all prevent the accurate application of the bandage. After the bandage has been applied, it is very difficult to know whether the pelvis is adjusted, and the limb sufficiently extended. The hands alone of the assistants can neither fix the pelvis, if the fractured ends are displaced, nor perform continued extension. The application of the bandage (spica) around the pelvis prevents still more the fixation of the pelvis, as well as the extension of the limb. The assistants who have to stand near the patient prevent the surgeon from executing the necessary manipulations, and superintending the application of the bandage. In order to obviate all these difficulties, the patient is placed during the application of the gypsum bandage in fractures of the thigh, on a peculiar bench, consisting of three removable pieces, provided with short feet, which may be placed on the mattress of a second bed, close to that of the patient, who then is laid on the bed-board, which elevates him half a foot and better allows the application of the bandage. To the upper piece calculated for receiving the trunk, both crests of the ilium are fixed by a simple mechanical contrivance. The extension of the limb is produced by weights attached to the stocking. First, the bandage is applied around the pelvis, after having removed the narrow middle piece, corresponding to the pelvis, so that the sacrum lies free. The patient, therefore, is not lifted, and the injured limb does not require to be moved upwards and downwards.

At first two layers of sack linen strips, spread with gypsum solution, are placed like a Scultetus bandage on the bed-board, after having put it on a second empty bed, in the vicinity of the patient. The injured extremity must be enveloped, as mentioned, with linen, and surrounded where necessary with wadding, and then the patient is cautiously removed under continual extension from his bed on to the bed-board. The board being elevated on feet of from three to six inches, the patient is raised high, and thus the application of the bandage is facilitated to the surgeon and assistants. The patient lies with the sacrum on the middle board, and the injured limb, from the groin to the fort, rests on the bandage ready made upon the foot-board. The tubera ischii are situated below the prominence (elevation) of the foot-board. The crests of the hip-bones lie between the excavations of the horns. The horns are firmly pressed upon, and fixed to the hip-bone. They are situated exactly between the anterior, superior, spina ilii, and the trochanter major, and can be fixed in every situation by means of the screws. The middle board is then removed, the sacrum of the patient thus lies free, so as to allow the circular bandage to be carried around it. Subsequently, a broad band, with a weight, is attached to the foot-joint, and hung over the roller. The bandage is now applied. The middle board is then again pushed in, and the patient remains for some time on the bed-board, until the gypsum bandage is hardened and dry. If the extension should be necessary to be continued, he remains on the bed-board for some time louger.

TREATMENT OF COMPOUND FRACTURES.

The displacement of the fragments *in fractures* of the bone, is a frequeut and very unfavorable accident, which with the degree of complication becomes more dangerous, and its treatment more difficult and tedious. If a displaced unreduced fractured bone is not consolidated, united by the exudation of callus, the consequence is a *Pseudarthrosis*, which is not easily remedied. But if the fractured bone is firmly united by a callous mass, the displaced broken ends thus united cause the limb to appear deformed or shortened, curved, and it may be useless. Although amputation might be justifiable in many similar cases, it nevertheless becomes the imperative duty of the military surgeon to try the conservative plan of retaining the limb, or some parts of it. The great triumph achieved by modern military and civil surgeons, in retaining what formerly used to be removed by rule; distinguishes modern from ancient surgery, and the experience herein of military as well as of civil surgeons, warrants a trial and imitation of the treatment on conservative principles. I shall for that reason dwell somewhat longer on the means of facilitating the conservation of the endangered parts, and I will consider, (*a*) The re-position of the fragments in serious complicated fractures in general, and those with splinters. (*b*) The situation of the limb in the extended or bent position, or on swings. (*c*) The mode of extension and retention in complicated fractures in general.

(*a*) RE-POSITION OR REDUCTION OF THE FRACTURED BONES,

is somewhat tedious to both surgeon and patient—to the former on account of the great displacement, the re-position being impeded by wounds, swelling, and muscular spasm—to the patient on account of the immense pain the re-position causes under similar circumstances. If the bone is, however, *totally* crushed, and the fracture thus a comminuted one, the re-position is more easily accomplished, and it may even happen that if the bone be splintered, no displacement in the longitudinal diameter of the bone occurred, as you will hear when I come to treat of comminuted fractures produced by *gunshot*. It is necessary to be cautious in manipulations for re-position of so severe fractures, and it is preferable to allow a shortening of the limb, for the means of retaining the parts thus displaced are utterly inapplicable on account of their positively injurious effect. By forcible traction, tension, or reflection, the irritated parts become still more injured, the sharp ends of the splinters being driven into the soft parts by such a manipulation, and hence hæmorrhages may arise, and also severe pain. The muscular spasms, which often occur, in splintered fractures of the leg for instance, supervene in the first two or three nights after the reduction, in the form of *sudden, convulsive, painful* contractions of the limb, disturbing and rousing the patient suddenly, displacing by it the reduced splinters so much that a new re-position becomes necessary; frequently the spasms associate with inflammations, and are thus still more dangerous.

A slightly bent position of the limb, together with a small dose of opium or *cannabis indica*, or chloroform inhaled, and in the inflammatory stages abstraction of blood, warm water dressings and fomentations, are used under such circumstances often with benefit. *Tetanus*, however, is to be apprehended. The re-position alone is not sufficient to evade those fatal muscular spasms, although the

reduction, if successfully accomplished, and the parts, if thus retained, may contribute much to the alleviation of the spasm. Re position should be tried without an apparatus, but the extension should be confided to intelligent assistants.

(*b*) THE SITUATION OF THE INJURED LIMB IN THE EXTENDED OR BENT POSITION, OR ON SWINGS.

The severely injured limb, and the easily displaced splinters, require above all *rest* and the most secure and comfortable position. The situation must be firm, without pressing unequally. The position of the limb must be retained *unchanged* for a longer time. The vulnerable parts have to be protected against *bedsores*. The heel, the malleoli, the tendinous prominences of the heel, and the internal condyles of the shoulder, should rest on a ring filled with horse hair, or on Gariel's air-cushion, or at least be provided with wadding and protected.

In order to facilitate the movements of the body without disturbing the injured limb, *swings* may be used with great advantage, chiefly in injuries of the leg. The simplest is the best. *Gutta percha* swings may be considered the most suitable, and are constructed in this way: A plate of gutta percha of two millimetres thickness, from fourteen to eighteen inches square, is bent, and by its four corners suspended by means of bands and hooks on a roller fastened to an iron stand, having a cross-bar, which may be fixed higher or lower. The lateral compression exerted by the swing on the limb commends it, together with the advantage of producing by its hardness a gradual and moderate reduction, a lasting mild retention, which serves as a lateral splint. The gutta percha swing being of an indestructible material, resisting the water, pus, use, and time (allowing therefore the irrigations with water), remaining always smooth, never breaks, and is therefore preferable to the *wash-linen swings* that last but a short time, to the *leather swings*, that soon offend by their odor, and to the *wooden swings*, which are too heavy. The foot may also be fixed by a *sole-plate* or by bands.

The situation of the limb, bent in the joints, as the lateral one, or on simple or double inclined planes, the angle of which may be variously altered, is proved to be the most comfortable to the patient; the most secure, applicable to all limbs, and most adapted for the spontaneous adaptation and retention of the fragments. The long time required for the union of similar fractures demands the *quiet, secure* position of the limb, and this is naturally, as everybody may convince himself, the *semi-flexion*. After a certain time passive movements should be made with the limb, in order that the joint, thus half-bent, should not become stiff, and that in consequence of the unequal extension of the several parts composing the joint, it may not become irritated or relaxed.

The situation and apparatus are various for the different limbs. For the upper extremity *straw* cushions are used covered with gutta percha, of paper thickness, on it the arm is laid, *half-bent* in the elbow, between pronation and supination, or in one or both directions, according to the injury of the soft parts. If the forearm lies on the front side, a soft *ball* should be placed in the hand, in order to bring the fingers also in the half-bent position. The gutta percha swing may be modified for the arm, and used in injuries of the elbow. A gutta percha plate embraces the arm and is suspended on one of the iron stands. A second gutta percha plate receives the forearm and the hand suspended on a separate stand. Both gutta percha plates are at an angle to each other, described by the more or less bent elbow, and touch each other on the inner concave side of the angle, where they can be fixed to each other by a band or hook. The hiatus thus formed on the outer convex side of the angle, in which the elbow itself lies, may be closed by a small *valve*, to be fixed to the first mentioned two plates of gutta percha, which, if dropped, allows access to the wounds, abscesses, bed-sores of the elbow, and the inner condyle, and permits the application of dressing in that place.

For the lower extremity, and especially for the injuries of the thigh, well-cushioned boxes may be used advantageously, the lateral walls of which may be dropped or reverted, and its angle varied at will by means of *hinges* and *double screws*. The situation of the limb is, by the lateral pressure of the wall, a secure one. For the leg Heister's apparatus is the best; it consists of a long box with side walls to be dropped, a foot-board, easily changeable in its situation and angle, and provided with an excision for receiving the heel.

(*c*) THE MODE OF EXTENSION AND REDUCTION IN COMPLICATED FRACTURES IN GENERAL—WHERE AND HOW IT IS APPLICABLE IN THE CONSERVATIVE METHOD IN GENERAL AND IN PARTICULAR.

The displacement of the fragments is influenced not only by casual external circumstances, causing movements of the injured soldier, from the moment of his falling down, and that of the injury, and through the whole time of his being transported, but the displacement also depends upon the *active muscular contractions*. Hitherto all points of the bones irreducible into the soft parts, and therefore prominent, used to be removed by the saw or resected. Jeffrey's chain saw answers this purpose best, after a thin gutta percha plate is used for protecting the soft parts during its application and use. Slight bony points may be removed by strong forceps. But Malgaigne proved by his observations how advantageously the prominent bones may be replaced by a permanent depression of them by means of awls, which are screwed into the prominent points from a fixed position, and thus cause them to be imbedded in and united with callus (appareil a vis). By its use from two to four weeks, the callus exudation is firm enough to keep firm the bony fragment.

The extension is best effected by long towels, carried around the body under the armpits, over the head of the bed, and thus producing the *fixation* or counter-extension of the body, while by a well-cushioned leather belt, provided with straps and buckles, or cords with rings movable in the necessary directions, the extension is made.

Reduction or re-position has sometimes to be left to the force of nature, and is effected by *muscular contraction*. If fractures splintered to a very great extent, are left to spontaneous contraction by the activity of the muscles on the inclined plane, by placing the limb in the most natural direction possible, by an adapted situation and lateral compression the extremity may become shortened or somewhat deformed, but will still be conserved, and its effects may be better remedied.

(To be Continued.)

Medical News.

Drs. J. W. Carter, A. B. Conant, M. K. Gleason, E. M. Norwood, and John Shrady Jr., have entered the Medical Department of the Ohio, General Morgan's Division, now stationed at Cumberland Ford, Eastern Tennessee, and left for the field of their duties on the 4th instant.

New Instrument for Tracheotomy.—M. Bouvier has lately devised a dilating forceps, with three branches, for facilitating the operation of tracheotomy. The instrument is curved, and the additional branch is hollow to serve as a director for the tube. The opening made in the trachea is a small one, and can be dilated in three directions instead of two. The instrument is made by Charrière.

Herr Bœdecker (*Zeitschrift für Rat. Med.*) proposes the following substitute for human milk:—Cow's milk, 8 oz.; cream, 2 oz.; water, 6 oz.; and sugar of milk, ½ oz.

ERRATUM.—10th line 2d column page 264—for "*distinctive*" read "*destructive.*"

DEATH.

GRISWOLD.—In New York city, April 27, STEPHENIA A., only child of CORNELIA and the late DR. STEPHEN GRISWOLD, in the 2d year of her age.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 5th day of May to the 12th day of May, 1862.

Deaths.—Men, 117; women, 90; boys, 118; girls, 88—total, 413. Adults, 207; children, 206: males, 235; females, 178; colored, 5. Infants under two years of age, 139. Children reported of native parents, 23; foreign, 136.

Among the causes of death we notice:—Apoplexy, 5; infantile convulsions, 29; croup, 9; diphtheria, 6; scarlet fever, 15; typhus and typhoid fevers, 10; consumption, 71; small-pox, 5; dropsy of head, 14; infantile-marasmus, 30; diarrhœa and dysentery, 4; inflammation of brain, 10; of bowels, 8; of lungs, 29; bronchitis, 5; congestion of brain, 8; of lungs, 10; erysipelas, 2; whooping cough, 5; measles, 0. 196 deaths occurred from acute diseases, and 44 from violent causes. 270 were native, and 143 foreign; of whom 87 came from Ireland; 4 died in the Immigrant Institution, and 71 in the City Charities; of whom 20 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

May, 1862	Barometer.		Temperature.			Difference of dry and wet bulb. Thrm.		Wind.	Mean amount of cloud.	Humidity Sat'tion, 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In.	°	°	°	°	°			
4th.	29.90	.10	56	44	68	7.6	11	N. to SE.	.07	590
5th.	29.70	.20	58	46	71	4	6	W. to S.E.	6	810
6th.	29.60	.07	55	47	64	7	10	N.W.	3	586
7th.	29.80	.24	52	41	63	8	12	N.W.	1	540
8th.	29.95	.10	48	39	63	8	12	N.W. to S.	1	530
9th.	29.90	.10	64	46	83	9	14	N.W. to S.	1	530
10th.	29.70	.20	67	54	83	9	13	W. to S.	5	540

REMARKS.—4th, Fine. 5th, Variable, shower at 1 P.M. 6th, Fresh winds, shower early P.M. 7th and 8th, Fine, wind fresh. 9th, Fine, wind fresh early A.M. 10th, Hazy P.M., wito fresh wind. Rain-fall for the week ending April 26th, one inch, and for that ending May 3d, two inches.

MEDICAL DIARY OF THE WEEK.

Monday, May 19.
- NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Thomas, half-past 1 P.M.
- EYE INFIRMARY, 12 M.
- OBSTETRIC SECTION, 8 P.M.

Tuesday, May 20.
- BELLEVUE HOSPITAL, Dr. Loomis, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M

Wednesday, May 21.
- NEW YORK HOSPITAL, Dr. Griscom, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Sayre, Is. Hos., half-past 1 P.M.
- " " Dr. Flint, Is. Hos., 3 P.M.
- EYE INFIRMARY, 12 M.
- NEW YORK ACADEMY OF MEDICINE, 8 P.M.

Thursday, May 22.
- NEW YORK HOSPITAL, Dr. Halsted, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Barker, half-past 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M

Friday, May 23.
- EYE INFIRMARY, 12 M.
- BELLEVUE HOSPITAL, Dr. McCready, half-past 1 P.M.
- SURGICAL SECTION, 8 P.M.

Saturday, May 24.
- NEW YORK HOSPITAL, Dr. Griscom, half-past 1 P.M.
- BELLEVUE HOSPITAL, Dr. Wood's Clinic, 1 P.M.
- OPHTHALMIC HOSPITAL, Drs. Stephenson and Garrish, 1 P.M

SPECIAL NOTICES.

NEW YORK ACADEMY OF MEDICINE.—DR. ALONZO CLARK *will resume his remarks on Albuminuria on Wednesday evening, May* 21.

OPHTHALMIC HOSPITAL.—DR. GARRISH *will operate for Cataract on Tuesday, the* 20*th inst., at* 2 *o'clock. Students of Medicine are invited to attend.*

Wm. H. Davol, M.D., late Physician to L. I. College Hospital, Brooklyn, removed to St. Paul, Minn. *References.*—C. L. Mitchell, M.D., T. L. Mason, M.D., Prof. E. N. Chapman, M.D., of Brooklyn; Prof. Austin Flint, M.D., Prof. B. F. Barker M.D., of New York.

To Physicians.—For Sale: a large county and village practice with a half interest in a drug house, in Greene, Chenango Co., N. Y. For particulars inquire of M. M. Wood, Greene, Chenango Co., N. Y.

Notice of Removal.

DR. HANBURY SMITH

HAS REMOVED HIS

LABORATORY AND SALESROOM TO

808 BROADWAY, Opposite Eleventh Street.

DR. NŒGGERATH

HAS REMOVED HIS OFFICE TO

125 WAVERLEY PLACE.

DR. JULIUS HOMBERGER,

Speciality: Diseases of the Eye,

has removed to

24 West 12th Street.

OFFICE HOURS: From 9—11 A.M. " 5—6 P.M.

John W. Shedden, Apothecary,
363 Bowery, cor. 4th St.

Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

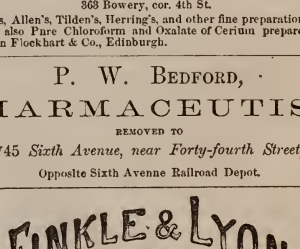
P. W. BEDFORD,

PHARMACEUTIST,

REMOVED TO

745 Sixth Avenue, near Forty-fourth Street,

Opposite Sixth Avenue Railroad Depot.



Descriptive Circulars with Samples of Work will be sent mail free.

Having just completed the most successful season's business they have ever enjoyed—wherein they have demonstrated that, *for all kinds of work*, they have "THE SEWING MACHINE OF THE WORLD"—enter upon the New Year with still more IMPORTANT IMPROVEMENTS, the latest being their

"NEW TAILORING MACHINE."

Having heretofore aimed almost wholly to supply a Family Machine, which should do all kinds of family sewing, and HAVING SUCCEEDED, we now enter the market with a Manufacturing Machine, which, for elasticity and strength of stitch—for rapid movements—for simplicity and durability, defies competition. While adapted to make the HEAVY ARMY AND NAVY COATS, with linen thread, it can, by a slight change, be made to do the fine family sewing; thus combining in one machine adaptation to FINE FANCY SEWING and HEAVY MANUFACTURING. This can be best appreciated by those who have owned and operated machines. We do not ask or expect the public to be governed by our statements alone. *We court investigation*, and refer to the thousands who have our machines in successful operation.

FINKLE & LYON SEWING MACHINE CO.,
538 Broadway, New York.

Sent Free by Mail on Receipt of Price.

Elements of Chemistry: Theoretical and Practical, by W. A. Miller. M.D. 2d edition, with additions. 3 vols. 8vo. $16.00
BAILLIERE BROTHERS, 440 Broadway, N. Y.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians (principally country Physicians), Pharmaceutists,* and *Patients.* Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important,* in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bourbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron,* which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria,* &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion,* in *chronic diseases,* and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart,* increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms,* and *Hypertrophies* of the *Heart,* in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyoscianus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being costed with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and costed with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa,* and general debility. Each Dragee contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache,* convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia,* and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Record says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

CLINICAL LECTURES ON THE PUERPERAL DISEASES.

DELIVERED AT THE BELLEVUE HOSPITAL MEDICAL COLLEGE.

By B. FORDYCE BARKER, M.D.,
PROFESSOR OF MIDWIFERY AND DISEASES OF WOMEN, ETC., ETC.

LECTURE IV.

ON LACERATION AND RUPTURE OF THE PERINEUM.

Case I.*—Primipara, aged 26. The labor presented nothing unusual, the child, a female, weighing 8¼ lbs., being born in about eight hours after labor commenced. The vertex presented in the right occipito-posterior position, and the occiput, instead of rotating under the pubes, passed into the hollow of the sacrum. The labor, however, progressed favorably, and the head soon appeared at the vulva. The perineum was then carefully supported, and as soon as the head was born pressure was made on the uterus, and kept up during the delivery of the body of the child and afterwards, to secure permanent contraction of the uterus. The cord having been tied and cut, and the child removed, the perineum was examined, and found to be lacerated to the extent of about an inch. It was noticed that there was some hæmorrhage, but it was thought that it would cease on the removal of the placenta. This was easily accomplished in a few minutes, but as the bleeding continued, particular attention was given to the uterus, upon which steady firm pressure had been kept up from the time of the delivery of the child's head, which was found to be firmly contracted. Remembering then a case which I had seen some weeks before, in which, after delivery by the forceps in the hands of Dr. Barker, the perineum being somewhat lacerated, severe hæmorrhage occurred, although the uterus was firmly contracted, and it was found that the bleeding was from lacerated vessels in the perineum, I concluded that the present case was a similar one. I therefore at once endeavored to arrest the hæmorrhage by sponging away the blood and clots, so as to discover the source of the bleeding, which I should have stated did not come on in a profuse and general flow, as if it were from several points at once, but in a steady, continuous jet, about as large as a small quill. I then passed two fingers into the vagina, and, with the thumb externally, I firmly compressed the lacerated edges of the perineum. This attempt was not at first successful in arresting the hæmorrhage, but after changing the position of my fingers several times I succeeded in arresting any further flow, and when, after an hour and a quarter's continuous pressure, I gradually withdrew my hand from the vagina, it was not followed by any bleeding. Firm pressure was kept up by my assistant upon the uterus during the whole time, but it showed no disposition to relax. The patient's knees were then tied together, a full opiate was given, and she was directed to remain perfectly quiet, and a nurse was left by her side to enforce my directions, and to send at once for aid should the hæmorrhage recur. It did not, however, and the patient made a very good recovery, adhesion kindly taking place. The amount of blood lost was estimated at rather over a quart.

Case II. occurred in a woman, aged 26, who was delivered of her second child, after a labor lasting about nine hours. The child was a female weighing 9¾ lbs., the presentation left occipito-anterior. There was, in this case, the same series of events as in the one just described—the firm pressure on the uterus after the delivery of the child's head, the permanent contraction of the uterus, and the rapid delivery of the placenta, and hæmorrhage, continuing, notwithstanding the uterus was well contracted. The amount of blood lost could not be accurately determined, but it was very considerable; and the veins of the labia and thighs, which were varicose, were decidedly less prominent when the hæmorrhage was arrested than when it began. The bleeding was stopped by the same means as in the first case, and the patient recovered well. The perineum in this case, too, was supported during the passage of the child, but the laceration was not so extensive as in the former case.

Case III. was in a primipara, aged 33; the labor lasting ten hours; vertex presentation, left occipito-anterior position; the child, a girl, weighing 7½ lbs. The case was in all respects similar to the last—hæmorrhage from the lacerated vessels of the perineum, and was arrested in the same way. This woman too recovered well.

Case IV.—Primipara, aged 17; left occipito-anterior position; the labor lasting fourteen hours; the child, a male, weighing 9 lbs. In this case the perineum was not supported, as the child was born when I was not with the patient, and the laceration was much more extensive, reaching to within half an inch of the anus. The hæmorrhage also was much more severe than in the others, amounting as it was judged to nearly two quarts. Pressure, moreover, failed to arrest it, and it was only stopped after it had continued some time by packing the vagina with ice, and retaining it by a compress. As an illustration of the force of the flow, I may mention, that as I withdrew my hand, after finding pressure would not arrest it, probably because I could not succeed in finding the bleeding vessels, a jet of blood escaped with such force as to strike the patient's knee, she being on her back with the legs extended. The recovery of this patient was not so rapid as that of the others, probably owing chiefly to mental causes. Nothing serious, however, interrupted her convalescence, and she soon regained her natural color. In all the cases the knees were tied together, the bowels were kept quiet by opium, and the lacerations united kindly.

Laceration of the perineum is an accident of parturition, which has occurred in the practice of the best obstetricians, and cannot always be prevented; but I believe that a thorough appreciation of the conditions under which it is liable to happen, and a judicious and timely use of means, appropriate to each special condition, to avert the danger, will render the accident a very rare one. We have no statistics from which we can learn either its comparative frequency, or the success of any measure in preventing its occurrence. There is no doubt that the anterior border of the perineum or fourchette is generally lacerated in the primipara, but this is of no importance. If we study the anatomical structure of the perineum, and recal the enormous distension to which it is subjected during the last stage of labor, we can but wonder why serious laceration of its tissues does not occur more frequently. The perineum is the space between the anus and the lower border of the vulva, and consists of skin, fascia, adipose, nerves, blood-vessels, and muscular fibre. The muscles found here are: the constrictor vaginæ, the sphincter ani, the ischio-cavernosus, and the transversalis perinei, all of which meet at, and have a common insertion at the centre of the perineum. The length of the perineum is ordinarily from an inch to an inch and a quarter or an inch and a half, but its tissues are so distensible that, when put on a stretch during labor, it will frequently measure from four to five inches. After parturition it is some ten or twelve days before it contracts to its normal length, This should be remembered, for reasons which I will allude to hereafter.

Mr. Baker Brown, in his work on the surgical diseases of women, divides laceration of the perineum into four varieties, 1. That in which the perineum is torn to the extent of an inch or less from the fourchette. This degree of injury is of no great moment, is little marked when the parts return to their normal state, and requires no special treatment,

* Cases reported by Chas. H. Suydam, M.D., House Physician to Bellevue Hospital.

2. Where the perineum is torn between the constrictor vaginæ and sphincter ani, those muscles remaining intact. This is actually a perforation, and quite a number of cases have been published in which the child has been delivered through this accidental opening. 3. Where the laceration occupies the entire length of the perineum, but does not involve the sphincter ani. 4. Where it extends so as to divide the sphincter ani, and even the recto-vaginal septum. In one case that I saw, there was laceration of the recto-vaginal septum, and at least some of the fibres of the sphincter ani, while the remaining anterior portion of the perineum was preserved. In November, 1857, I was called in consultation by a physician of this city, to see a lady twenty-one years of age, who had been in labor with her first child twenty-six hours. I found the perineum enormously distended by the pressure of the head, and the left hand and forearm projecting through the anus. The doctor informed me that the head had been pressing on the perineum for some hours, and the pains were so regular and so violent, that he had with each pain confidently looked for the exit of the head from the vulva. But just before sending for me the hand and arm suddenly appeared through the anus, after which all pain had ceased. After some consultation it was decided that we should not attempt to replace the arm, but leave it alone, and that I should attempt to deliver the head by the forceps. With great care I succeeded in doing this with very moderate traction, the handles of the forceps being directed upwards at only an acute angle from the plane of the abdomen of the mother. For some ten days the bowels of this patient were kept closed by opium, and complete cicatrization followed, the only interruption to normal convalescence being that the catheter was required to empty the bladder for nearly three weeks. It is the province of the obstetrician much more frequently to prevent the accident, than to cure the patient after it has occurred.

To be able successfully and skilfully to do this, it is absolutely essential that the conditions which are likely to produce it should be thoroughly appreciated. We may perhaps give a more clear conception of these conditions by classifying them as follows:—

1. Certain anatomical conformations of the maternal organization are peculiarly liable to this accident, as (*a.*) a very straight sacrum. Now and then you will meet with a woman in whom the sacrum has little if any more curvature than is ordinarily found in the sacrum of the male. This is the case with the woman whom I have shown you in the wards, with complete procidentia uteri. The perineum was lacerated in a labor some years ago, and the posterior border of the vulval opening is not three lines from the anus, and on examination we found that the sacrum was remarkably straight. In such a pelvis the axis of the outlet must form an angle with the axis of the pelvic cavity, and the effect of the uterine contractions is to drive the head directly down upon the perineum in a line nearly parallel with the axis of the superior strait. (*b.*) The direction of the vulval opening differs very greatly in different women. I am not aware that any author has alluded to this, but your own future experience will surely verify the truth of the assertion. In some the ostium vaginæ is nearly parallel with the plane of the trunk, while in others it is nearly at right angles with this plane, or to put the statement in other words, in some the direction of the vaginal canal is nearly parallel with the axis of the pelvic cavity, while in others it more nearly corresponds with the axis of the outlet. This difference does not depend entirely, as you may at first suppose, upon the length of the perineum, nor upon the straightness or curvature of the sacrum, but a careful study of the subject has led me to the belief that it is due more to the conformation of the soft structures within the pelvic cavity. You can readily understand how much more liable rupture or laceration of the perineum is to occur, where one condition exists, than where the other does. You can also see the bearing of this anatomical fact, if you admit that it is an anatomical fact, upon the necessity in some cases, and the proper mode in different cases, of supporting the perineum. (*c.*) There is a great difference in women as to the elasticity and distensibility of the perineum, depending upon the amount of adipose tissue in its structure. Where this is very considerable there is sure to be an unyielding perineum. (*d.*) Laceration is liable to occur where there is extreme smallness of the vulva. According to Velpeau, its mean size from the clitoris to the posterior commissure of the vulva is one inch and a half. In some cases, exceptional ones to be sure, that I have had, I am sure that the measurement between these two points could not have exceeded three-fourths of an inch. There is a prevalent notion, even among medical men, that the size of the vulva corresponds with the size of the mouth, but I am convinced that the opinion has no foundation in fact.

2. The perineum is liable to laceration from the excessive size of the head or the shoulders of the fœtus. This excess may be either absolute, as in one case that several of you saw me deliver by forceps in this hospital, where the occipito-mental diameter of the fœtal head was six and five-eighths inches, one and one-eighth of an inch beyond the ordinary normal measurement. In another case, where there was no excess in the size of the head, I found great difficulty in delivering the shoulders, and on measurement the bis-acromial diameter proved to be six inches and three-quarters. The excess may only be relative as compared with the size of the vulva.

3. Laceration of the perineum is often liable to occur from certain peculiarities in the mechanism of labor, as (*a.*) in vertex presentations where the occiput rotates backwards into the hollow of the sacrum, because here an occipito-frontal diameter must first pass out of the vulva, which is three-fourths of an inch greater than the sub-occipito-bregmatic diameter, which ordinarily first passes out in occipito-anterior deliveries. (*b.*) In face presentations, because during the delivery the vulval orifice must be distended to the length of the longest diameter of the fœtal head, that is, the occipito-mental diameter, which is ordinarily five and one-quarter inches, must pass through. (*c.*) Incomplete flexion, when the head, in vertex presentations, presses upon the perineum, also may be a cause of great danger of this accident, as in this case the occiput does not fully engage under the arch of the pubes and thus the occipito-frontal, instead of the sub-occipito-bregmatic diameter, will first be driven through the vulval orifice. (*d.*) On the other hand, excessive flexion may also tend to this result, as the direction of the expulsive force of the uterus falling nearer the occipital half of the occipito-frontal diameter, will be an obstacle to the extension of the head, which takes place in its normal exit through the vulva.

4. The physiological character of the labor is an important element as regards the danger of this accident. (*a.*) Where the labor is too rapid, from the intensity and frequency of the uterine contractions, and especially if the sacrum is somewhat less curved than is usual, the head may be driven through the vulva before the perineum has had time to be gradually extended; (*b.*) or where the labor is very tedious, and the head remains a long time at the lower strait, until the perineum becomes hot, dry, congested, and unyielding, if a rapid delivery is effected either by means of ergot or the unskilful use of the forceps, the sudden expansion of this tissue is very apt to involve a more or less extensive laceration. (*c.*) Excessive nervous irritability, causing the patient to make most violent straining efforts to force the head through the vulva before the perineum is prepared for it by a gradual expansion. My house staff have repeatedly mentioned cases to me, occurring in the hospital, where patients have suddenly withdrawn themselves during a violent pain, and thus the perineum, being deprived of all support, is lacerated to a greater or less extent. I am confident that a majority of the cases of laceration that have come under my observation here have occurred in this way, if I can accept the testimony of my

assistants, which I certainly do. Within a few years past I have heard from physicians remarks like the following, viz. "that they had never known a case of severe laceration of the perineum except where it had been *well supported.*" Now this is most decidedly contrary to my experience. I have known laceration to occur where this has undoubtedly been the case, and from what I have already said you can see that this must sometimes occur, but such a case I think very rare. A teacher of midwifery —some of you know this statement to be true—while speaking of this accident to some medical students by the bedside of a woman in the last stage of labor, made an assertion something like that I have just quoted. While he was yet talking, his experience was then and there somewhat enlarged, for on concluding his remarks he found the head delivered, and extensive laceration of the perineum. The remark of Denman I often hear quoted, that "when women were delivered without assistance, I have not, in any case, observed any considerable laceration," as an argument against supporting the perineum, I have recently operated for the worst case of laceration that I have ever seen, in which the perineum was not supported. A girl of nineteen, belonging to a very respectable family in this city, loved "not wisely, but too well." She was engaged, and expected to be married early last summer to a young man, who was this autumn killed in battle. Her pregnancy was successfully concealed from her family and friends. When she was delivered no physician was with her, and no one was with her except an old family nurse, who had been the wet-nurse of her infancy, and an elder married sister. The child was born very unexpectedly, the poor girl during the labor not giving utterance to a single audible sound. I should mention that it was premature—as is supposed, short of eight months. The child was adopted by the sister, who had been married some twelve years and had no children of her own, and no one, not in the secret, seems to have suspected where the child came from. Four days after her confinement she was so ill that a physician was called, and of course the nurse was obliged to make a confidant of him. The severe injury she had suffered was revealed to him, a few days afterwards, from the fact that she was wholly unable to retain her fæces. In addition to this case I may add that, since I have been connected with this hospital, two patients have been brought in with severe lacerations, one of whom was delivered in the street, and the other in the police station-house.

5. I must not omit to mention unskilful or careless manual or instrumental delivery as a cause of laceration of the perineum. I will here only allude to this fact, as a full discussion of this point necessarily pertains to your instruction on manual and instrumental labor.

As to the effects and consequences of laceration of the perineum, I will call your attention to one most instructive illustration furnished by the cases that you have seen, inasmuch as your obstetric text-books do not, I believe, allude to the danger from hæmorrhage when this accident occurs. In one of our cases the patient would have certainly died from hæmorrhage had not its source been discovered. In all of them the hæmorrhage was too serious to be disregarded. Now every careful obstetrician is always on the alert to guard against post-partum hæmorrhage; but it is probable that the danger from this source has generally been regarded as exclusively due to an uncontracted uterus, which leaves the mouths of the utero-placental vessels open. Cases have been reported where fatal hæmorrhage has occurred, although the uterus has been firmly and permanently contracted. It is possible that in some of them the source of the hæmorrhage has been the same as existed in the cases that you have seen here, I do not propose to detain you long in discussing the prophylactic measures against laceration of the perineum, because in pointing out to you the various physical and physiological conditions under which this accident of parturition is liable to occur, I have already suggested to you the means of prevention. Among medical men it has struck me that there is a prevalent tendency to two decided errors on this point. One is to the belief that if the perineum is well supported everything possible has been done to avert the danger from laceration of the perineum. If I have succeeded in making myself clearly understood you will see how entirely fallacious such a belief is.

While I believe that properly applied support of the perineum is in many cases of essential service, yet this is by no means the only resource that we have to prevent laceration. From what I have already said it will be inferred that the danger is to be met by special means, oftentimes in addition to the support adapted to each peculiar condition, and that for an obstetrician to be competent to successfully avert the danger he must be thoroughly familiar with the mechanism of labor. He will then understand how the improper or maladroit use of the forceps may in some cases be the cause of the accident; while in occipito-posterior deliveries, in some face presentations, and in other cases of vertex presentation, where there is excessive flexion of the head, and the sacrum has a less curvature than is normal, the forceps may be absolutely necessary to prevent laceration. The cases where the forceps are indicated on this account are undoubtedly rare and exceptional, but remember that it is just these exceptional cases where judgment, skill, and acquirement are demanded from the obstetrician.

Anæsthetic agents are another important means of great value in preventing this accident. They are indicated for this purpose in four classes of cases. 1. In that form of rigidity of the perineum depending upon excessive irritability of the muscular fibres that enter into its composition. I have repeatedly been struck with the rapidity with which relaxation and dilatation of the perineum, under these circumstances, has followed the inhalation of chloroform. 2. In those cases where the danger arises from the violent and rapid uterine contractions, driving the head or the shoulders through the vulva before the perineum has been sufficiently expanded. I have frequently, just as the labor was terminating, pushed the chloroform to the extent of carrying the patient into the state of profound anæsthesia, for no other reason than to protect the perineum. 3. Paradoxical as it may appear, after what I have just said, an anæsthetic is often indicated to protect the perineum in tedious labors. Long continued pressure of the head may produce congestion and inflammation of the perineum, which not only renders it more unyielding but more easily torn. It becomes hot and dry, and very painful, and uterine action becomes irregular and feeble in consequence of this condition. Now, under these circumstances, I have seen the inhalation of chloroform followed by immediate relaxation of the perineum, and a restoration of the normal moisture and temperature of the parts, while efficient action of the uterus was at once resumed.

4. Chloroform is indicated as a resource against laceration, in those cases of nervous irritability where the patient will not remain sufficiently quiet, during the last expulsive pains, to permit the protection of the perineum by the proper support. A large proportion of the cases of laceration, which have occurred in this hospital during my term of service, which began in 1855, have been due to this cause, judging as I do from the history of the cases given to me by the different members of my staff.

In some very rare cases, this accident can only be guarded against by incision of the lateral superior portions of the perineum. An incised wound heals much more readily than a lacerated one. It affords an opportunity for election as to the point where the lesion shall occur, and thus the obstacles which prevent immediate adhesive union may be more effectually guarded against, and experience seems to prove that an incision of two or three lines on each side is sufficient to prevent laceration in the median line of the perineum, the extent and result of which cannot be foretold. So then, we would perform the operation on the ground that we thus select the lesser instead of the greater evil, and my experience leads me to the convic-

tion that there are but two physical conditions which render the operative procedure necessary, viz. where the vulval orifice is excessively small, or where the amount of adipose in the perineum is too great to admit of its necessary expansion. Under both these circumstances I have incised with success, and with most favorable results in all respects.

The other error, which, in my judgment, is becoming rather fashionable in the profession, is exactly the opposite of that I have been speaking of, viz. that to support the perineum is, if not positively injurious, quite unnecessary. Dr. Graily Hewitt, of London, has during the past year published a small monograph on this subject, in which he expresses the belief that, in ordinary cases of labor, to support the perineum as a device to prevent it from laceration, is practically worthless, and that there are grave reasons for suspecting that, in many cases, it has led to the very evil it was intended to prevent. He seems to believe that where there is danger of this accident the principal precautions to be used are, to deliver the woman on the back, with the legs separated, and in the delivery of the shoulders, to direct the delivery as much forwards as possible. Now, if this last direction is good practice for the delivery of the shoulders, why is it not eminently good practice in the delivery of the head, for this is in reality the chief thing accomplished in supporting the perineum? The main thing effected by the support is, to press the head as close as possible under the pubic arch, and thus to relieve the strain upon the perineum. That injury may result from long continued pressure upon the perineum I have no doubt, but this is never necessary, for if the pains are strong enough to endanger laceration, delivery must take place rapidly. Without entering upon an extended argument upon the subject, it seems to me that judiciously applied support to the perineum, during the last expulsive efforts of the uterus, tends to accomplish the following results, viz. to relieve pain, allay irritation, diminish congestion, and direct the force of the uterus from the perineum towards the vulva, and, in some cases, to counteract the too violent efforts of the uterus. But please do not forget, that to support the perineum is a very different thing from forcing the head over the unyielding perineum.

Original Communications.

SURGICAL SERVICE OF THE NAVY IN TIMES OF WAR.

TRANSLATED FROM THE FRENCH OF

DR. JULES ROCHARD,

SURGEON IN CHIEF OF THE FRENCH NAVY.

(*Continued from page* 273.)

PREPARATIONS TO BE MADE BEFORE GOING INTO ACTION.

In war times all vessels should be prepared at the time of leaving port to meet the enemy, and the Surgical Department should, of all others, be careful not to be taken unawares. Before starting the surgeons should have all their bandages, instruments, tourniquets, etc., ready for immediate use. The senior surgeon should, by frequent conferences, make the officers under him understand the part they are to take during the action; he should also see the Infirmary men and give them detailed instructions as to their duties, so that at the decisive moment every one shall know what he has to do, and the service be performed without disorder or hesitation.

The first care to be taken, as soon as the call to quarters is heard, is to remove the hospital from the gun room, in which it is located. The chief surgeon should designate such men as must be lowered into the lower decks. Those who are only slightly indisposed or wounded will of their own accord take their places at the guns. Those who can move about, and yet cannot work, should be sent to the lower decks and the hold, so as to attend their comrades who will soon be brought down.

This first duty being attended to, the surgeon should see that the chains and slings are properly fixed, that the ropes are securely fastened, and that they run easily in the pulleys. He should see that the cock-pit is properly arranged to receive the wounded, that the beds are placed so as to economize room, that the operating tables are in convenient position, that a sufficient stock of candles and lanterns, water, sponges, swabs, sand, etc., has been provided.

CARE TO BE GIVEN DURING ACTION.

If the engagement is severe, and the wounded are rapidly brought in, the surgeons must not think of performing any complicated operation. The men must be carefully examined as they are brought in; those who are only slightly wounded should be sent back to their posts, after having had a preliminary dressing applied. and those who are seriously wounded be treated as thoroughly as possible. This is all that can be done during the action.

The assistant-surgeon should take his post on the lower deck, to be prepared to examine rapidly the wounded as they are brought down; he should only allow those whose cases require immediate attention to be lowered into the cock-pit, and retain near him those whose wounds are not of much danger; by this means the cock-pit is kept free, and unnecessary transportation is guarded against.

(The wounds which the surgeon is called upon to dress are so similar to the ordinary gunshot wounds that there is no necessity to particularize them.)

The minor operations which have to be performed, are not generally painful enough to call for the use of chloroform. There is another reason why its use should be restricted. The first condition for its administration without danger, the first step to be taken to remedy any accidents to which it may give rise, is to cause the patient to respire plenty of fresh and pure air. It is needless to lay any stress on the impossibility of fulfilling this condition in the midst of the heated and vitiated atmosphere with which the wounded are surrounded. But chloroform is not useful, solely, to suppress the pain caused by operations; it can also calm the sufferings to which the surgical art can bring no relief.

In cases where the wounds are so severe that no hopes of recovery can be entertained, art can still be made useful in allaying the last throes of agony. Chloroform used with precaution, but in a continued manner, and without going so far as to produce complete anæsthesia, answers this end. It would be cruelty not to avail ourselves of its services. The example of our confrères in the army sanctions its use; the Medical Director of the French army in the Crimea insisting on its adoption, as an act of charity. An infirmary man, or any intelligent aid who has been made to understand the end which is wished to be obtained, and the danger of overpassing it, can be intrusted with this duty.

SURGICAL SERVICE AFTER THE FIGHT.

The surgeons' work is not at an end when the fight is over. Until then they have only made headway against the *eventualities of the moment;* they must now complete their work, making a more complete inspection of the wounded.

Whilst every one on board is busied repairing damages, and order is being re-established at the guns, the chief surgeon, after having dressed all the wounded that have been brought to him, looks over those who are lying about him, goes to his assistants, and receives their report, and then informs the commander of the state of his charge. It is of absolute necessity that the wounded should be taken as soon as possible from the cramped places and vitiated atmosphere in which they are. Their removal, therefore, to one of the batteries, is one of the first things to be attended to. Ordinarily, the commander designates the

lower battery for this purpose. This is certainly less well ventilated, is dark, and damper than the upper battery, and the port-holes are closed as soon as the sea roughens; but it gives a large space, is less encumbered, is more quiet, and the patients do not interfere with the working of the vessel.

As soon as the battery can be occupied, the chief-surgeons should have all the iron bedsteads, with the exception of those wanted for the permanent hospital, placed there. If there are not sufficient bedsteads, hammocks should be slung. This is hardly necessary, except when the vessel is alone or separated from the rest of the squadron. When it is with the squadron the division-surgeon should visit each vessel which has been engaged, take note of the number of wounded, and give his orders according to the circumstances. If necessary, he should cause one of the vessels which may have suffered the least, to be transformed into a hospital ship. Everything being ready the sick should be removed as soon as possible, such as are able to do so walking by the aid of their comrades, the others being carried on hand-litters.

The men who have to undergo at once any important operation, such as an amputation, should be taken to the hospital, where they will be more comfortable. If they are too numerous a post for operating can be established at one end of the battery, which can be entirely isolated by hanging cloths, etc., from the beams.

The wounded being now all in bed, a close examination must be made of their wounds, and a decided course taken as to their treatment.

Those who should receive the first attention are such as have arterial hæmorrhage, of which the surgeon has not been able to find the source, and which has necessitated the use of a tourniquet applied to the stump. As nothing will answer except ligature of the artery, this should be looked to at once. Having placed a bed before and across a port-hole, so that the light may fall directly on the wound, the surgeon removes the tourniquet, and replaces it by the fingers of his aid; guided by his anatomical knowledge, he makes the necessary incisions to find the artery. The aid raises his finger from time to time, so that a spirt of blood may guide the operator, and helps him to discover the source from which it proceeds. Often a hæmorrhage, profuse at the moment of the accident, does not recommence when the pressure is removed. This should not lead to a false security, as it will reappear. As soon as the clots have been removed, and the wound has been washed and carefully cleaned, the blood will always show itself. The search should be continued until the artery is completely isolated, and tied both before and behind the opening.

For the dressing of contused wounds and complicated fractures the best medicine is cold water. The application of lint and bandages steeped in cold water, with a waterproof covering, or sprinkled from time to time, should entirely supplant poultices, of which too much use is made. It has the advantage of lightness, it does not irritate the skin, and it economizes much valuable time. The necessity of superintending the irrigating day and night is certainly a great inconvenience, and to this cause we must trace its being introduced into so few hospitals, and why, notwithstanding the use of it being recommended by the most eminent military surgeons, it is so little used in field hospitals. Nothing is easier than to arrange on board ship as many irrigating apparatus as may be wanted. All that is needed are two halves of a keg, or pails, in the bottom of one of which several small holes have been made; this being filled with water is suspended to a hammock-hook, the dripping falls on a piece of oiled-silk, and is carried into the other pail placed by the bedside. One of the convalescents can be appointed to fill the upper pail as often as it is emptied.

We do not wish to bring forward our personal experience on the subject of *debridement*, but coincide with that of the celebrated Professor of the Val-de-Grâce, who denounces *preventif debridement* practised to overcome a strangulation which is nearly always imaginary, or to simplify wounds which would cure themselves. We should practise it in cases where it was necessary to make an important diagnosis, to remove a foreign body or a fragment of broken bone. The splinters should always be removed as soon as possible, whether they are loose or adhering to the soft parts, provided this can be done without too much effort. Baudens goes further and recommends the resection in some cases of the angular ends of broken bones. Wounds made by musket or rifle shots occur so very seldom on board ship, that it would not be necessary to discuss this point, were it not that sailors have been so much called on of late years to participate in land attacks.

(To be Continued.)

REPORTS ON
SOME RECENT IMPROVEMENTS IN MATERIA MEDICA AND THERAPEUTICS.

By EDWARD H. JANES, M.D.,
OF NEW YORK.

IV.

TRITICUM REPENS, A REMEDY IN IRRITABLE CONDITIONS OF THE BLADDER.

Henry Thompson, Esq., communicated to the Lancet for October 12, some experience he has had with this remedy, which has since been noticed by a number of both American and foreign medical journals. The article in question is a well known weed, usually called dog-grass or couch-grass, exceedingly troublesome to farmers from the difficulty in eradicating it. It grows about two feet high, with stems trailing at the lower joints. It is the creeping root that has long been used to some extent in medicine, especially by the French and Germans. It has had some reputation as a substitute for sarsaparilla. It is much used in decoction, as an emollient, diuretic, etc., and in the hospitals it forms the basis of the common *tisane*. Mr. Thompson's first acquaintance with it was derived from a gentleman in the country, who had long used it to relieve frequent and painful micturition consequent upon a severe stricture of the urethra, and upon his representations he was induced to give it a large trial, both in private and hospital practice. It has proved, according to his observation, more efficacious than buchu in vesical irritability produced by inflammation of the prostate and neck of the bladder, in severe gonorrhœa, in pain and spasm from calculus or stricture. It is also found to be of some service in some cases of prostatic enlargement, in renal calculus, and whenever the micturition is very frequent or painful. The following is his uniform formula:—"One ounce of the dried and cut stem is infused in a pint of boiling water for an hour. The liquor removed by straining has been given, unmixed with any other remedy, in quantities varying from twelve ounces to a pint, during the twenty-four hours, in several doses. The taste of the infusion is rather agreeable than otherwise; it produces no nausea or derangement of the stomach." It should be gathered in the spring, shortly before the leaves appear, slowly dried without artificial heat, when it may be cut into short lengths for use.

FERRI CARBONAS EFFERVESCENS.

For this new chalybeate, which has recently attracted some attention both in Europe and this country, we are indebted to Dr. Thomas Skinner, obstetric physician to the London dispensaries, who, recognising in the protocarbonate of iron one of the best preparations we can administer whenever chalybeates are indicated, and as its present officinal preparations are incapable of preserving it from decomposition for a great length of time, sought, and after some trouble and experiment, succeeded in obtaining it in the permanent and elegant form of an effervescing granular powder, an account of which he published in the British

Medical Journal about a year ago The following are his formula and process of preparation:— ℞ Acidi tart. ʒ iij.; sodæ bicarbonatis ʒ v.; ferri sulph. ʒ x.; pulv. sacchari ʒ j. ʒ vj.; acidi citrici ʒ ij. 1. Mix the sulphate of iron with the sugar and part of the tartaric acid. 2. Mix the citric acid with the remainder of the tartaric acid and the bicarbonate of soda. 3. Add the mixtures, and thoroughly incorporate them by sifting. 4. The whole is now to be thrown into a metallic pan set into a water bath; in a few minutes it will separate, when it should be rapidly stirred until granules are formed. If preferred it may then be flavored with oil of lemon. The preparation has the appearance of the granular effervescent citrate of magnesia, with the addition of a slight yellowish green tint. A drachm and a half of this mixture contains ten grains of sulphate of iron, which, with the bicarbonate of soda, will produce in solution at least four grains of nascent protocarbonate of iron. There are also developed a tartrate, a little citrate, and sulphate of soda, which act as a gentle aperient, obviating the usual astringent effects of iron, as well as the frequent constipation attending cases requiring chalybeates, especially among females. After the effervescence subsides the carbonate of iron, which is held in solution by an excess of carbonic acid gas, imparts to the solution a clear, light green color, which, as the excess of gas escapes, gradually becomes of a deeper green, until at length the carbonate separates from the solution in the form of a fine cloud, and is ultimately precipitated in the form of an impalpable powder. It may be administered in doses of one drachm or a drachm and a half, twice or thrice a day, either before or after eating, as is found most suitable. This dose, in half a tumbler of water, drunk either during or after the action of effervescence, is said to form a mild, sparkling, and refreshing chalybeate. Like most of the preparations of iron, dilution will be found to increase both its tolerance, and therapeutic action. Dr. Skinner does not claim for it the same effects derived from the protosulphate, the iodide, or the sesquichloride, when a prolonged course of iron is required; but where a moderate course of a few days, or a week or two is necessary, he has found it to be well borne, and to produce a much more manifest chalybeate effect within a given time, and in a smaller dose than other preparations of iron. He has found it particularly serviceable in facial neuralgia, arising from anæmia or other causes relievable by iron, especially if the bowels are at all torpid, in which cases he has often found a few doses to act as a specific. It should be continued, however, after the pain disappears, so as to entirely remove the condition upon which the neuralgia depends. To prevent discoloration of the teeth, it is recommended after each dose to apply with a tooth brush, a wash composed of half a drachm of quadroxalate of potassa, with six ounces of rose water, after which the mouth should be rinsed with cold, or tepid water.

Brassfounders' Ague.—Dr. Headlam Greenhow describes a new form of ague, to which he has given the above name. The symptoms resemble ordinary ague, but differ in that the paroxysms occur irregularly, and are distinctly traceable to exposure to the fumes of deflagrating zinc. The attack begins with malaise, listlessness, aching in the limbs, nausea, headache, and shivering, with occasional vomiting, followed sometimes by febrile reaction, but always by profuse sweating. Those who work steadily at the occupation appear to acquire a tolerance of the poison, which is, however, only temporary, for after a few days' absence from work, even the most seasoned casters are apt to have an attack of the metal ague after exposure again to the fumes of the deflagrating zinc. Operatives who work over molten zinc below the temperature of deflagration, enjoy an entire immunity from this disease.—*London Medical Review.*

The Annual Meeting of the Illinois State Medical Society has been postponed in consequence of the absence of many of its members at the seat of war.

Reports of Hospitals.

NURSERY AND CHILD'S HOSPITAL.

CASES OF SPURIOUS HYDROCEPHALUS,

WITH REMARKS.

By J. LEWIS SMITH, M.D., CURATOR.

Case I.—A male infant, nearly six months old, died at the Child's Hospital on the 24th day of April, 1862, with the following history:—He was wet-nursed, fleshy, and apparently entirely well, till six days before his death, when from some unexplained cause he was seized with obstinate vomiting, which continued nearly forty-eight hours. When it ceased, drowsiness commenced, ending in death after four days. His face during the somnolent stage of his sickness was pallid and cool; eyes partly open; pupils sluggish, but of equal size; bowels torpid; anterior fontanelle depressed; when aroused he noticed objects for a moment, and immediately relapsed into sleep; no Meibomian secretion; pulse accelerated, and not intermittent, the day before death numbering 150; respiration accelerated, without sighing, the day before death numbering 30. He had no convulsions, and died quietly as if passing into sleep. *Sectio Cadaveris* on the following day. The brain weighed twenty and a half ounces, and to appearance was perfectly healthy; the amount of serum in the ventricles of the brain, and at its base, was no more than natural; membranes also natural; abdominal organs generally somewhat congested; the stomach and the large and small intestines were vascular in streaks and patches, but there was no thickening of the mucous membrane; the vascularity did not appear to be inflammatory; the liver and kidneys, examined under the microscope, were found healthy; thymus gland small, weighing only fifty-seven grains; organs of the thorax healthy, except a little more hypostatic congestion than usual of the posterior portion of the left lung.

The following cases occurred in private practice:—

Case II.—March 13th, 1859. A——, a male child, 22 months old, previously in good health, has had during the past three weeks diarrhœa, with febrile symptoms; pulse 162, resp. 52; has a slight cough, and a few mucous râles are noticed on both sides of the chest; resonance on percussion good; is somewhat emaciated, and not disposed to much exertion; tongue moist, and slightly furred, and appetite poor. Little care has been taken with his diet. He has the eight incisor and three anterior molar teeth, and is cutting the remaining anterior molar, and two canines. *Treatment.*—Pulv. ipecac. comp., gr. jss., every four to six hours; arrow-root, rice and milk for diet. From the 14th to the 18th inclusive, there was no material alteration in his symptoms, with the exception that the diarrhœa was partially restrained. On these five days the dejections numbered respectively 4, 1, 1, 6, 3 or 4, watery and brown; pulse on the same days, 154, 156, 124, 150, and 144; the respiration on two of these days numbered 56 and 46. The Dover's powder was given at varying intervals. March 19th.—Pulse 124; has become drowsy since the last record, and when aroused is fretful. Omit Dover's powder. Treatment: cold applications to the head; mustard pediluvia. Evening: pulse 136; eyes constantly closed, and the head reclining; surface generally warm; tongue dry and furred; vomited at first, but not in three or four days; no grinding of the teeth. Apply cantharidal collodion behind each ear, and continue other local treatment. 20th.—Pulse 130; is constantly sleeping, and when aroused is very fretful, and soon relapses into sleep; no unnatural heat of head, and no dejection since yesterday. Treatment: a dose of castor oil, nourishing diet. Evening: pulse 140; has had four stools, but the drowsiness remains as before; his cheeks are sometimes flushed, sometimes pale; pupils sensitive to light; margins of the eyelids covered with secre-

tion. The gums are lanced to-day. 21st.—Pulse 140; had seven dejections in the past twenty-four hours. Treatment: vesication behind each ear, mustard pediluvia, cold to the head. Evening: pulse 118. 22d.—Pulse about 120; remains in the same lethargic state; face cool, and head constantly reclining. Evening: stupor more profound; pulse 102; bowels tending to constipation. Treatment as before. 23d.—Pulse 108; had six dejections from a dose of oil. Evening: pulse 104; no dejection; drowsiness as before. Treatment: brandy gtt. xx, every two hours, beef-tea and milk porridge. 24th.—Pulse 110; rolls the head; had one dejection; is more fretful than during the past four or five days; continue brandy and beef-tea. 25th.—Is not drowsy to-day, and is less restless; rolls the head occasionally, and does not appear to see distinctly; has a slight cough; bowels nearly regular; pulse 100; respiration natural; surface warm, and no unnatural heat of head. Continue stimulants and nourishing drinks. From this date he entirely and rapidly recovered.

Case III.—May 2, 1860. S——, 20 months old, has had diarrhœa during the past two weeks, and of late a slight cough; pulse 142; does not vomit, but did in the beginning of his sickness; very fretful; no undue heat of surface; stools very offensive and watery, of a dark color, and passed with much force; they number six to twelve daily. Treatment: a simple alkaline mixture hourly, and rice water for diet. 3d.—Pulse 136; dejections less offensive, and less frequent. Evening: pulse 158; is almost constantly sleeping, except when aroused, and is then very fretful; respiration natural; cheeks and fingers cool. Continue treatment, adding beef-tea. 4th.—Pulse 140; coughs occasionally; his head is constantly dropped, and eyes shut; when aroused is very fretful, and he immediately relapses into sleep; rhythm of respiration and pulse natural; no vomiting; three or four dejections in twenty hours, yellow at first, but green on standing. Evening: pulse 140, resp. 36; had this evening a slight convulsion, expresses no wish, and takes drinks reluctantly; face and extremities cool. Treatment: brandy, beef tea, milk porridge. 5th.—Drowsiness less; was quiet through the night; pulse 124; had three dejections similar to those of yesterday. Treatment continued. 6th.—Takes more notice of objects, and is gradually improving; pulse 158. 7th.—Pulse 140; is fretful in-doors, but quiet when carried out; can be amused by objects for a considerable time. 10th.—Has entirely recovered.

Case IV.—December 13th, 1861. A German child, 18 months old, has had relaxed bowels during the past four weeks, the stools being thin and watery; during the last eight or nine days has been much inclined to sleep; when aroused is very fretful, and fully conscious, but immediately his eyelids gradually close, and he remains asleep until again disturbed; forehead hot; face cool and pallid, and extremities cool; pulse 164, resp. 32; during the past week has had a cough; dulness on percussion in the left infra-scapular region; depression of the infra-mammary regions on inspiration. Treatment: ammo. carb. gr. j. every two hours. 14th.—No material change in symptoms; drinks readily when aroused; pulse 148. Treatment: cantharidal collodion behind each ear; continue ammo. carb. 20th.—Remains drowsy since the last record; pupils moderately dilated, and right pupil somewhat larger than the left; no vision during the past three days; had two dejections in the last twenty-four hours; face pallid, and the edges of the eyelids smeared with secretion; resp. 44; since yesterday the respiration has been accompanied by sighing; no irregularity of pulse; is very restless when awake, and rolls his head. The vesication behind the ears has been continued, the carbonate of ammonia given with intermissions, and nourishing diet. 21st.—Has had slight epistaxis, and a purulent discharge from the left ear since yesterday, and his sight is restored; pulse 140; the cough remains, though slight; has three to five dejections in twenty-four hours. Continue, and give tannin, gr. jss., according to the diarrhœa. 22d.—Symptoms, generally, as before; is somewhat emaciated, but not greatly; vision good; had six dejections since the last record. 23d.—The drowsiness is not so great as before; is much prostrated, and the hands tremble; head warm, but face and limbs cool; pulse 152. 24th.—The stupor increased since the last record; he had partial spasms, and died to-day. *Sectio Cadaveris*, 23 hours after death; moderate emaciation; rigor mortis; thoracic and abdominal organs not examined; membranes over the vertex of the brain raised by serous effusion; surface of the brain congested, except the anterior lobes of the cerebrum; on slicing the brain the puncta of blood were found unusually large, both in the grey and the white portions; three ounces of bloody serum escaped from the sub-arachnoid space, and from the ventricles; the substance of the brain was healthy, also the membranes.

The disease, to which we have called attention in the foregoing cases, will be at once recognised as that which Drs. Marshall Hall, Abercrombie, and Gooch first described. Its essential condition is exhaustion. It is, in its pathological character, a state of deficient innervation, or of passive congestion of the brain, sometimes with serous effusion. It differs in its lesions from the disease which it resembles in symptoms, that formerly known as acute hydrocephalus, but which recent writers on diseases of children more accurately describe as two affections, simple and tubercular meningitis, in being non-inflammatory, and therefore not attended by fibrinous exudation.

It is well known that this affection, termed by some spurious hydrocephalus, by others hydrocephaloid disease, is usually consequent on some debilitating pathological condition, often looseness of the bowels. The younger the child the greater the liability to exhaustion, so that under the age of six or eight months the antecedent disease is, frequently, of short duration, while in older children it is more protracted. The first patient, whose case is narrated above, was under the age of six months, and he was, to appearance, in perfect health till within two days of the development of cerebral symptoms. The only assignable cause of the hydrocephaloid disease in this case was the vomiting, though it is possible that, instead of being the cause, it was a premonitory symptom. The other three patients were older, the ages varying from eighteen to twenty-two months, and in these the antecedent disease, diarrhœa, had continued from two to four weeks. The dejections, instead of being green, as Marshall Hall states they usually are, were in all, brown and quite watery.

In Case I. the anterior fontanelle was still open and much depressed. Dr. Watson, of London, remarks that, in young children, the state of the fontanelle aids much in the diagnosis of spurious hydrocephalus. It is depressed in this complaint, while in active congestion and in meningeal inflammation it is prominent. Attention to this fact would prevent the error, into which some of the ablest writers on diseases of children have fallen, that of describing some forms of active cerebral congestion under the head of hydrocephaloid disease. For instance, Dr. West considers the cerebral complication sometimes present in the early stages of pneumonia as a form of this disease. I have noticed even in the early stages of catarrhal and bronchial affections, where the fever ran high, and there was stupor or symptoms threatening convulsions, that the fontanelle was prominent, showing a pathological state the reverse of spurious hydrocephalus.

Another point of interest in the first case was the absence of sighing in the respiration, and intermittency in the pulse. It has seemed to me that these irregularities of respiration and pulse, occurring in cerebral diseases, indicate effusion at the base of the brain, and compression at the origin of the pneumogastric. If so, their absence in this case is readily explained. I never yet have treated a child with disease of the brain, who had sighing, or intermittent pulse, who recovered, although I have known these symptoms to disappear for a time by purgation.

Case II. is interesting on account of the long duration

of the stupor, nearly five days, and yet the child recovering. Such cases reviving from a state almost hopeless, by stimulation, to the amazement of friends, cannot fail to render us grateful to those distinguished British observers who first pointed out the true pathology of this affection.

The state of the pulse, in the above cases, did not aid in making a differential diagnosis between spurious hydrocephalus, and those acute affections of the brain in which there is excess of red blood. It was in all accelerated, and apparently of natural fulness, the pulse of irritative fever, rather than of exhaustion.

In the two fatal cases, the post-mortem appearances were different. In one there was no perceptible change in the condition of the brain or membranes; in the other there was congestion with effusion. The former condition is probably not uncommon, when the disease occurs after short previous illness, but the latter more frequent after protracted ailments. In those cases of spurious hydrocephalus following diarrhœa, which are the cases ordinarily met with, congestion and effusion are present. The mortality of children in cities during the summer months is much increased by the supervention of this form of hydrocephaloid disease on a relaxed state of the bowels.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, March 26, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

(*Continued from page* 276.)

MULTILOCULAR OVARIAN TUMOR WEIGHING THIRTY POUNDS.

DR. PEASLEE presented a *multilocular tumor weighing thirty pounds.* This was removed, *post-mortem*, from a young lady between 22 and 23 years old, and was remarkable mainly for the quantity of dropsical fluid in the peritoneal cavity to which it gave rise. It was first noticed by the patient at the age of 18, in September, 1857, or about four years and a half ago; and was at first supposed to be the result of taking cold during the catamenial period. Dr. Peaslee first saw her in June, 1858, when she was quite emaciated, and measured 45 inches round the abdomen. He then diagnosticated a multilocular ovarian tumor proceeding from the left side. He again saw her in April, 1859. She now had a circumferenee of 50 inches. She had had much severe headache, which had been relieved by the liquor potassæ arsenitis.

On the 3d of July, 1859, he found her circumference to be 53 inches, and removed 64 lbs. of fluid by tapping—48 lbs. from the largest sac, and the remaining 16 lbs. from a smaller one. She rallied favorably and promptly, and eleven and a half months afterwards (June 15, 1860) he found the circumference 66 inches (five and a half feet), and removed 115 lbs. of fluid from the *peritoneal cavity*—the larger sac not having filled again.

She again filled in ten and a half months, and on the 29th of April, 1861, Dr. Peaslee removed 135 lbs. of a light-colored fluid from the peritoneal cavity, her circumferenee now being 67 inches (five feet and seven inches). In a little more than seven months (December 9, 1861), paracentesis abdominis again became necessary, her circumference now being 74 inches (six feet and two inches); and at this time 149 lbs. and 3 oz. of fluid were removed from the cavity of the peritoneum. She promptly rallied, and attended church in ten days after the operation.

Her condition now seeming to justify the operation of ovariotomy in Dr. Peaslee's opinion, he advised her to come to the city for that purpose about the 1st of January. She was, however, attacked by parotitis a few days before that time, became much prostrated, and did not regain her strength sufficiently to make a journey of nearly 200 miles, till a month later than the time appointed; and arrived here much exhausted, and again much distended with the re-accumulated fluid. She gradually failed, and died on the 15th of March. The fluid was removed again on the 2d of March, then being 105 lbs.; but she still failed gradually till death. The 105 lbs. had accumulated in eighty-four days. It was an interesting fact in this case that, though the distension was so unprecedented, the patient had never suffered essentially from dyspnœa.

The amount of fluid removed on two occasions, Dr. Peaslee regarded as without a parallel. Some years since he investigated this point, and found that Sir Astley Cooper had removed the greatest amount of fluid on record at a single tapping; a little less, according to his recollection, than at the second operation in this case (115 lbs.). At the third tapping, Dr. Peaslee removed from this patient 135 lbs., and at the fourth, 150*lbs. minus thirteen ounces.* The aggregate of these three tappings is 400 lbs. minus 13 oz., and the average is over 133 lbs.

The autopsy showed the tumor to be extensively adherent, as Dr. Peaslee had before decided. He would not, however, have been deterred by the adhesion from completing the operation of ovariotomy had he commenced it, since in two eases in which he had successfully performed that operation the adhesions had been quite as extensive and as firm. In one case they were in some parts so firm that he could not tear them across, and had to pass ligatures through them and then divide them with the knife. There were no adhesions to the intestines, and Dr. Peaslee had not yet met with a case in which there were any, though he had often seen adhesions to the great omentum. As a general rule, also, there are no adhesions on any part of the posterior aspect of this class of tumors. They are confined to the anterior aspect; and Peaslee regards them as *physiological* and not as *pathological* developments. In other words, they are developed to fix and support the tumor; and are not, as a general rule, the result of an inflammatory process.

The fact that the fluid in all the tappings after the first was found to have accumulated in the peritoneal cavity, is an interesting one. It was due to a rupture of the largest sac, and the one containing 48 lbs. at the first tapping, but which still continued to secrete and pour its secretion into the cavity of the peritoneum. Thus the tumor itself, as a whole, was ever smaller after the first tapping than at that time. This had also been recognised by Dr. Peaslee. The fact that a sac may be inadvertently ruptured during the operation for the removal of the tumor during life, had been before alluded to by Dr. Peaslee before this society. It occurred in one of his cases, and was followed by a free hæmorrhage, which was arrested till the tumor could be removed by compression at its pediele by the hand of an assistant.

DR. CLARK read the following from Dr. Deane, of Woodstock, in reference to the dimensions of an ovarian tumor:—

"Miss Hannah White, æt. 49, died in Gill, Mass., November, 1852, of ovarian dropsy of the right side. The tumor weighed 112 lbs.; had been growing eleven years. It consisted of a liquid substance, varying in color and consistence, contained in a number of cysts of variable sizes, the largest holding about three gallons. The sacs containing the liquid weighed 17½ lbs. after the watery portions had been discharged, leaving 94½ lbs. of water.

"The ovary of the left side was of its normal size and healthy condition, as well as the rest of the abdominal viscera, with the exception of being displaced by the tumor. The tumor extended from the ensiform cartilage nearly to the knees, and the body measured five feet eight inches around the abdomen."

DR. CLARK also referred in this connexion to a tumor, supposed to be ovarian, which he had seen in Ohio several years ago. It occurred in a woman æt. 30. The weight of the tumor was supposed to be greater than that of her body, which in health was only 112 lbs., but now 225 or 230 lbs. It stood forward very prominently a distance of two or three feet, and extended backwards beyond the

pelvic bones at least a foot and a half. The interesting point in the case was, that the woman became pregnant while in this condition, but miscarried early. No autopsy was allowed. The case is reported in full by Dr. Judkins, of Cincinnati.

(To be Continued.)

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

AN INTRA-UTERINE POLYPUS REMOVED BY THE ECRASEUR, PRECEDED BY ARTIFICIAL DILATATION OF THE OS.

A case of this kind is reported to the Surgical Society of Ireland, by Robert Johns, A.B.M B., etc. The patient complained of being seized soon after marriage with hæmorrhage from the vagina, to which she had ever since been subject, and from which for the last year she had scarcely ever been free. She had become anæmic, was colorless, and unable to walk from extreme debility. She complained of palpitations, ringing in the ears, weight and bearing down in the vagina, and pain over the sacrum, in back, and loins. The uterus was much enlarged; its cervix and os much congested. The latter, which was nearly closed up, was ulcerated on its posterior lip; blood was seen coming through it, and from the ulcerated surface. By means of a small sound a tumor was discovered in the uterine cavity, which accounted for all her symptoms. He ordered her infusion of bark with sesquichloride of iron, and proceeded to dilate the os with prepared sponge, in order to reach the tumor, and if advisable to remove it. The sponge not being retained so as to dilate beyond the size sufficient to admit the index finger, it was determined to try artificial dilatation with the hand whilst under chloroform, which was accomplished in about half an hour, so that three fingers were passed into the uterus, and a fibrous polypus about the size of a goose-egg, attached by a pedicle to the fundus, was seized and drawn gently through the os, the chain of the écraseur passed around it as high up as possible, and the tumor removed in about twelve or fifteen minutes. Not a teaspoonful of blood was lost. The ulceration was healed in a few days by a solution of nitrate of silver, and she was put on tonics and a good diet. At the expiration of a month she was quite recovered.—*Dublin Medical Press.*

A NEW PROCEDURE FOR TRACHEOTOMY.

The *Journal de Médecine et Chirurgie* describes a new method of performing this operation, submitted to the Academy of Sciences by M. Maisonneuve. The instrument he proposes to use, he styles the tracheotome. It is a kind of incurvated needle, sharp on its concave side, with a *regulator* intended to limit the depth of its penetration. It may be fixed in a handle like Deschamps' needle, and provided with a very simple mechanism to keep the trachea open, as soon as the incision has been terminated. The patient lying on his back, with his head moderately thrown back, the surgeon holds the instrument in his right hand, applying the point to the middle of the crico-thyroidean space, gently inserts it in a perpendicular direction. A sensation of resistance overcome indicates that the point has penetrated into the respiratory tube, the regulator preventing it from entering too deeply. Directing the point of the needle towards the sternum, he gently conveys it forward to the trachea until the needle is entirely concealed in the flesh. During the operation, the regulator must be constantly in contact with the integument. When the requisite depth has been reached, the surgeon forces the point of the needle through the trachea and the integument, and divides from below upwards all the soft parts included in the concavity of the sharp edge. By compressing the integument upwards with the left hand, at the moment the point of the needle extends from the trachea, and backwards at the moment of incision, the incision of the integument is made more exten-ive than that of the trachea, and therefore the blood flowing from the wound has less tendency to penetrate into the air tubes.

American Medical Times.

SATURDAY, MAY 24, 1862.

SURGICAL INGENUITY.

The practice of surgery, more than that of any other department of our profession, teaches us to be prepared for the emergency. Injuries are almost always peculiar, either in the manner of their infliction, the circumstances that surround the sufferer, the precise part of the body mutilated, or in the complications that exist. The experience of our predecessors stands promisingly forth to guide us in our practices, and by the very accumulation of such data it would seem that almost every exigency was provided for. But that this is not the case can be proved in the record of the many unique cases that are constantly occurring in the practice of every surgeon. It is clear then that much depends upon the action of the surgeon himself under such circumstances, and that the only resource which is held out to him is that offered by his own ingenuity.

The importance of the possession of this qualification has shown itself in many a brilliant discovery, and it is fair to say that surgery owes as much in its advancement to ingenuity as to anything else—anatomy, perhaps, alone excepted. We must not be understood as saying that every practitioner of surgery should be a "surgeon artist," or instrument maker, but he should at least be able to follow out principles for treatment by modifications, or by devices of his own, so that every particular indication in the case is perfectly met. Very often circumstances of place are such as to render it impossible to have at hand a convenient instrument, or a well made and suitable apparatus, but the comfort and welfare of the patient should not for this reason be sacrificed. The surgeon is then called upon to devote his thoughts to the simplification of means to the end; if a particular instrument is not at hand he must be ready to rely on some other; if the case is a rare one his own judgment must alone come to his aid.

Upon the battle-field the ingenuity of the surgeon is often taxed to the uttermost in the desire to minister to the suffering wants of those under his charge, and we have seen that such endeavors have not been in vain; if tourniquets have not been at hand, the twisted handkerchief has arrested the ebbing life-current; if splints and other similar apparatus were needed, the simple contrivances set forth in a previous number—the mere use of young saplings and the like—have been found to suffice in keeping the parts in apposition, rendering transportation safe and comfortable. Again, means equally simple and efficient can be resorted to in the treatment of fractures, as an instance of which we quote the following admirable suggestions set forth in the report of the Sanitary Commission on the *Treatment of Fractures:*—

"An excellent plan for putting up fractures of the extre-

mities, in an emergency, may almost always be adopted; it is only strange that it is so little known. This is to take a bundle of straw, the stiffer the better (wheat straw is the best), and to inclose the limb in it, the component straws lying parallel to the axis of the limb. The latter and its envelope may then be bound round with wisps of straw, strings, bandages, or any convenient article, care being taken not to compress the seat of fracture too strongly. Greater firmness may be given by inserting two or more sticks among the straws at either side of the limb. Should swelling now occur, the dressing will yield, the straws being simply drawn out in the direction of their length. The state of the parts may be readily watched; hæmorrhage will be at once manifest; and when the dressing is to be removed, we have only to loosen the circular bands. Extension and counter-extension may be made in various ways, upon a limb thus done up. When suitable straw is not to be had, the stems of bushes, corn-stalks, or leaves, cane-stalks, twigs, or small sticks may be substituted. Almost any fracture of the extremities can be thus arranged so as to be comfortable, even if the patient has to be transported some distance. And in those rare cases in which the bones of the trunk are broken, either on the march or in the field, the whole body may be encased in the same way, a larger bulk of straw being of course required."

The simplest form of extension and counter-extension can be resorted to, as is now well known, independent of the use of any appliances in the shape of a splint. Stretchers have been extemporized with muskets and a blanket, and many a poor sufferer, by the comfort it has afforded him, has lived to bless the forethought of the one on whom his welfare and perhaps life depended. An aneurism needle has been made by bending the "eyed end of a sail needle." In fact, there seems to be no end of devices which may be, and have been, resorted to in emergencies by surgeons who have lacked a supply of instruments.

In civil practice the same want is often felt in reference both to instrument and apparatus; and if a record were made of all the contrivances resorted to, and the expedients adopted by the surgeon in the country, no one would have supposed it possible that so much could be accomplished with a pocket case and an ordinary jack-knife. A few of our practical surgeons have done much towards simplifying apparatus, prominent among whom we notice Drs. Buck, Swinburne, and Vedder. To these the profession owes much for cheap, useful, and efficient contrivances for the treatment of surgical accidents and diseases. It has been truly said, that any surgeon who properly understands the principles of treatment in a case, can, with a fair amount of mechanical tact, make use of any particular apparatus and secure a good result; while it is equally true that on the other hand there are those who, in the language of a popular professor of surgery, "use splints instead of brains;" who imagine that a well-contrived appliance must suit every case. To this latter class, however, we are happy to say but a very small number belong, inasmuch as the responsibilities which hang around the treatment of fractures more particularly, are too fruitful in suits of malpractice to warrant the undertaking on the part of any one who has not a perfect reliance on his own resources.

The ingenuity for which Americans have rendered themselves famous has shown itself especially in these times of war, in the settlement of many questions of mechanics and engineering, and we have a right to expect that similar results will be witnessed in the practice of surgery. The great battles that have lately been fought, and the large numbers that have been wounded at Fort Donelson, Pittsburgh Landing, and Williamsburgh, have offered to those upon the field rare opportunities for seeing injuries of almost every variety and in almost every portion of the body, and by the ingenious and thoughtful surgeon many a novel operation has doubtless ere this been performed. Our best surgical talent is on the field, and when the surgical record of the war is made we have the best reasons for expecting that the interests of science will be served in a truly creditable manner.

THE WEEK.

The New York Asylum for Insane Convicts, at Auburn, as we learn from its Second Annual Report, is in a flourishing condition. The class of cases now in the institution are for the most part of a chronic type, and hence any good results from treatment are rare. The Medical Superintendent, Dr. Edward Hall, urges the necessity of extending the usefulness of the asylum that it may accommodate all that class of unfortunates, the criminal insane, who are incarcerated in the various prisons of the State. We hope his suggestions will have that amount of weight with those in authority which they deserve. Not only in the light of treatment is this change from a prison to a home necessary, but common humanity demands it as a matter of justice. The number of patients treated during the past year was 85, and of these 5 died.

—

A letter will be found in another column in reference to the suspension of Dr. Hewitt, late of this city. We are glad to hear that the charges made against him are likely to prove unfounded, and heartily approve of the course which he insists upon adopting.

—

Efforts are being made by the Sub-Committee of the Joint Committee of the Common Council on National affairs, to secure the Mount St. Vincent Academy as a permanent home for sick and wounded soldiers. It is designed more especially for the reception of chronic cases. The building is in a very desirable locality, and will probably accommodate about 600 men. The object of the Committee is a very laudable one, and deserves to meet with that success which we are inclined to think it will. The building is at present in the hands of the Central Park Commissioners. There is now an urgent want for hospital accommodations for those who are being brought to this port by the Sanitary Commission, and too much haste cannot be made to secure suitable buildings for the purpose. There is not room in the city for those who should be removed hither. The military hospitals in Washington, Alexandria, Annapolis, and Baltimore, are full to overflowing, and the city of New York will naturally be now fixed upon as the principal depot for the wounded. We called attention to this subject in our last issue, and we are glad to see that some accommodations, meagre though they be, have been made to meet urgent wants. Thirty hospital tents are in readiness on David's Island, capable of providing for 400 patients, and 240 beds in the buildings upon the old quarantine grounds; the Seaman's Retreat has generously opened one of its wings, and will accommodate a limited number. The state authorities have ordered the transformation of the barracks on Riker's Island, but the accommodations there are very indifferent, and it is questionable whether the wounded will be at all benefited by such a resting-place. But notwithstanding all this we have still to ask for room.

Reviews.

RESEARCHES AND OBSERVATIONS ON PELVIC HÆMATOCELE, by J. BYRNE, M.D., M.R.C.S E., Resident Fellow of the New York Academy of Medicine, etc., pp. 44.

DR. BYRNE has written a very instructive tract on the subject of pelvic hæmatocele. The present pamphlet is enlarged from a paper recently read before the New York Academy of Medicine, and printed in their Bulletin. The disease treated of has been but little studied, and Dr. Byrne with a praiseworthy zeal has set himself to work to investigate its nature, causes, and treatment. His observations are essentially of a practical nature, and are for the most part founded on cases that have occurred in his own practice.

Under the head of pelvic hæmatocele, he speaks of two varieties, the intra-peritoneal and sub-peritoneal, and refers to the following as causes of the affection:

"(1st.) Inflammation of the uterine appendages and its consequences. oftentimes the primary. and by far the most frequent among the *predisposing causes* of pelvic hæmatocele. (2d.) Habitual constipation of the bowels, and morbid growths interfering with the free return of venous blood. and thereby producing a varicose condition of the vessels. (3d.) A hæmorrhagic diathesis from a disordered state of the blood. (4th.) Tubular, uterine, or vaginal occlusion, obstructing the normal secretion, or giving rise to regurgitation through the Fallopian tubes. The immediate or *exciting causes* may be, (1st) sudden suppression of the menstrual, or a hæmorrhoidal discharge; (2d), tenesmus or violent muscular exertion; (3d), injuries by a fall or otherwise, and (4th), excessive coitus, and mental emotions tending to active congestion of the internal organs of generation.

"Still another cause remains to be mentioned which might, with propriety, be classed both as predisposing and exciting, namely, *extra-uterine pregnancy*."

In the matter of treatment he recommends the use of the trocar, introduced through the rectum. The part of the paper treating of the differential diagnosis of the disease, contains the account of an original experiment, proving the following facts:

"First, that although a lateral position of the tumor will always denote its sub-peritonæal character, yet, the fact of its being central and occupying the whole posterior part of the vagina does not, by any means, prove the contrary; and, secondly, that the position, size, or shape of the swelling—though, *if intra-peritonæal, always central* both above the brim as well as in the vagina—possesses but little, if any, value as a guide to differential diagnosis."

The disease has been found to occur most frequently in married women, especially those who have borne children. In reference to the general character of the disease, his investigations have led him to the following conclusions:

"*First*—that bloody tumors within the female pelvis are not met with *frequently*, and should not be confounded with pelvic cellulitis or its consequences. *Second*—that the relative location of the tumor is not an infallible guide in determining as to its intra or sub-peritoneal character. *Third*—that certain pathological principles and physiological phenomena inseparable from such inquiries, make it, at least, very probable that the *causes* which predispose to the two forms of hæmatocele, are not only entirely distinct, but differ from each other as widely as pleurisy and pneumonia: and *fourth*—when inflammatory action precedes these hæmorrhages, the character and seat of said inflammation determine the location of the effused mass."

As a whole, we consider the essay the most complete and meritorious one which has been written upon the subject, in the English language. It deserves the careful perusal of every one interested in the subject of which it treats.

A NOVEL SPLINT.—A correspondent of the *Chicago Medical Journal*, speaking of the extreme hardness of the bread and biscuit furnished to the western troops, credits the statement of a soldier, who said that a surgeon, in adjusting a fractured leg, used *a hard cracker as a splint!*

THE CONSERVATIVE TREATMENT OF FRACTURES.

BY ISIDOR GLÜCK, M.D.
CHIEF SURGEON TO THE HUNGARIAN HUSSARS.

(*From the American Medical Monthly.*)

(*Concluded from page* 284.)

THE GYPSUM BANDAGE APPLIED IN COMPLICATED FRACTURES.

In fractures complicated with injuries of the skin, with considerable contusions, vesications, by tendency of the skin to soreness in the region of the injury, and by great displacement of the fractured ends, it is necessary to apply the gypsum bandage with openings (windows), and to leave the injured portion uncovered. The windows of different sizes are made during application of the bandage, and may be formed in two ways.

1. Leaving interspaces between the splints and the transverse strips, to be fixed in the region corresponding to the injury, or

2. By applying on both sides of the limb, or in the front and back of it, wooden splints, provided on both ends with thick pads, and by fastening them by transverse strips.

First Method.—The limb must be enveloped (as in simple fractures) in an old sleeve or a stocking, or in divided drawers, only with the difference, that the linen is cut transversely in the region of the fracture, and the flap of it thus produced is not pressed to the limb. The extension and re-position are then effected, and to the limb the necessary situation is given, removing thus the broken ends from the skin threatened to be pierced. The splints must be thicker than in simple fractures, and applied on both sides, and over and under the fractured spot, leaving free the injured portion as well as its circumference. The splints must closely fit in other parts, and are then fixed by two or three layers of transverse strips, going once or twice around the limb, *above* and *below* the injured region. On the fractured spot, or in the region of the sore skin, the transverse strips surround the splints only partly, and opposite to the wounded portion, the ends are carried to the margin of the opening (window), and then reverted on the limb. But if only one side has to remain uncovered, a splint may be applied to it in the described manner, and to the other side a gypsum splint. If in complicated or simple fractures a very firm bandage is required, as for instance in fractures in the neighborhood of joints, by the preparation of the splints, pasteboard, sugar-paper, etc., may be placed in the linen layers after having been painted over on both sides with gypsum solution. In complicated fractures, where profuse suppuration may be anticipated, the window must be formed so that the pus should not find its way under the bandage. The margins of the window must be sufficiently distant from each other. The application of Pirogoff's gypsum bandages in simple as well as complicated fractures, is calculated for the battle-field.

In hospitals where more time can be taken and the means allow it, it is preferable to take, instead of the sack-linen rollers, linen flaps and cotton or flax. The bandage lies thus firmly and is light. If a roller is applied instead of the transverse strips, the gypsum bandage is fixed in this way:—1. The limb is surrounded by old linen, and on two or three sides provided with splints, leaving an interspace between them. 2. The splints are firmly prepared and fixed to the limb, and then surrounded by circular turns of a roller, in the vicinity of the joints in figure eight turns (spica testudo). 3. While the rolle. is carried around the limb, its outer surface is painted over with gypsum solution (by the hand or a brush), but so as to leave the place corresponding to the interspace free of gypsum. In order to facilitate the cutting open and removal of the bandage, a piece of roller dipped in *oil* should be placed in the interspace of the splints.

If it is necessary to press the splints in the wounded region still firmer to the limb, they may be fastened by

strong thread or by a dry roller carried circularly (which has to be removed when the bandage gets dry), or two or three transverse strips three quarters of a yard long, are painted over both sides with gypsum solution, leaving in the middle about an inch free from the gypsum solution. The part free from gypsum is placed over the window in the bandage, and the painted ends are carried around the limb, bringing by it the splints close to to limb. As soon as the bandage is dry and firm, the unpainted part of the strips covering the window is cut through by a pair of scissors. On the injured portion is placed, through the window, lint dipped in camphor, or fomentations of sugar of lead, etc., or in injuries of the skin with vesications, a solution of nitrate of silver (from two to fifteen grains in one ounce of water) is applied.

Second Method—The limb is surrounded with old linen above and below the fractured portions; the injured part remains uncovered in its whole circumference, or one side only, according to the extent of the place to be left uncovered. Long wooden splints are then applied on both sides or in front, and on the side the splints are provided with thick pads turned towards the limb, and fixed so that the pads, at least six inches wide, should be placed close and firmly to the limb; the splints then are fastened to it by transverse strips in the region of the pads. By this proceeding the splints remain distant from the injured place to the extent of the thickness of the pad, therefore nearly six inches. If the injury is considerable or on both sides of the limb, one single splint may also be sufficient. In this case, it is advisable to fix it first by thin English sheet iron, and subsequently with transverse strips. In complicated fractures the gypsum bandage may be applied in the following way: Having applied the splints so as to leave uncovered the injured part, the same are fixed by a dry roller, which is to be painted while carried around, leaving a part unpainted. On that portion, the dry linen is cut through by scissors; the ends of the strips thus formed are then turned downwards, and by means of the gypsum solution fixed to the sides, in which case the solution must be prepared with glue in order to harden slowly. Other changes can also be made in the gypsum bandage as applied by Pirogoff: for instance, first a layer of strips immersed in gypsum solution, then splints, and again a second layer of transverse strips to fix the splints. Sometimes the splints are at first fastened by thread and then by transverse strips.

THE REMOVAL OF THE GYPSUM BANDAGE FROM THE LIMB

May be effected in two ways:

1. Like the starch bandage, being cut open by Seutin's scissors or a strong scalpel.

2. Removing the transverse strips under continual use of water, in order to precipitate the dust formed by it.

VARIOUS MODES OF PREPARING A GOOD GYPSUM SOLUTION, TO DELAY ITS HARDENING, AND TO MAKE THE GYPSUM BANDAGE EASY AND ELASTIC.

The gypsum solution hardens in five or ten minutes, according to the quantity of water used for it. In order to apply properly the gypsum bandage a quarter of an hour is required. In fracture of the neck of the thigh, and in all greater bandages, the lower layer of the strips often hardens, while the upper ones are not yet applied; the lower layer, therefore, does not stick to the upper one, the bandage does not become firm, and breaks easily, it is therefore necessary to delay the hardening of the bandage, which is accomplished by adding *glue* to the gypsum solution. The smallest quantity of dissolved glue delays already two or three times the duration of its becoming hardened. Half a teaspoonful of glue dissolved in hot water, and of the consistency to remain fluid, when cold, added to two pounds of water and two pounds of plaster of paris, is sufficient to delay the hardening of it for a quarter of an hour; but the glue must not be mixed with the gypsum solution, but always with the water, previous to adding the plaster of paris to it. If added to the gypsum solution it becomes crumby. The thicker the glue, the less of it is required for delaying the hardening of the gypsum solution. If too much of it is added, it does not harden for days. The gypsum solution becomes firmer through the addition of *glue*, but the surface remains moist for a longer time. Starch and dextrine exert the same influence on the gypsum solution. Thus prepared, no haste is needed; the bandage is cautiously placed under the limb without lifting the patient; and changes are made on the bandage at pleasure.

In order to prepare a light bandage, it is necessary to take instead of the coarse linen for splints, *thin, not polished pasteboard;* and for transverse strips, *fine* linen left unpainted on one side of the limb, corresponding with the interspace of the splints. In order to leave on the linen unpainted spots, a longitudinal space, finger-wide, may be brushed over with fat or a mixture of soap solution and oil. The sack-linen strips are immersed in the gypsum solution, which does not adhere to the spots covered with the above mixture, and may be easily freed from the gypsum solution by the fingers. The gypsum bandage may be made more *elastic:* 1st. By applying the transverse strips in figure 8 turns in the neighborhood of joints, and at least two layers; 2d. In the bend of the joints, pasteboard or paper immersed in the gypsum solution must be placed between the linen layers. If the bandage is applied with interspaces between the splints, and if portions of the transverse strips are left free from the solution, it becomes so elastic as to allow the margins of the bandage, when cut open, to recede from each other so far as to permit comfortably taking the thickest out of the bandage limb and returning it again. The same bandage may be applied two or three times, if cut open and provided with new transverse strips. Instead of the transverse strips, leather *belts* with buckles may also be used, or dry rollers. The elasticity depends upon the linen. The more elastic and finer the linen is, the more elastic is also the bandage; therefore, old linen answers better this purpose than the coarse sack-linen. 4. It depends upon the manner of conserving the bandages removed from the limb, and the formation of *cases* and straps for the transportation of the wounded from fractures. A bandage removed from the limb breaks into pieces and makes dust, which may be obviated by various means. The cases (or capsules) made by those means, together with the leather and boxes for the extremities (of various sizes), not only well answer the purpose of transporting the wounded soldier, but have also a good aspect, are light, are not easily soiled, and attract no moisture. It is required: To apply the bandage with openings and longitudinal interspaces. If very light, fine, and elastic bandages should be made, it is necessary to take, instead of the coarse linen for splints, unpolished pasteboard, common paper, or firm, worn hospital linen, and fine linen for the transverse slips. In order to make the walls of the bandage still thinner and easier, the limb may be placed in a stocking cut open, and over it a layer of Scultet's bandages, *only the outside* is then covered with gypsum solution to which *glue* was added. On the sides and the back splints, dipped into gypsum solution (of pasteboard, paper, or linen) are applied. In front a longitudinal interspace is left (finger wide), and the splints are fastened at first only by thread, and subsequently by transverse strips of fine linen, that also has uncovered portions corresponding to the interspaces. When the bandage becomes *entirely dry* on the limb, it is cut open by scissors along the interspace between the splints, and all unpainted and oiled linen flaps are removed on the margins thus gained. The *inside* of the capsule is now lined with linen or oiled silk, and cushioned by filling the hollows with wadding, while the outside is painted over with oil or dextrine solved in water. In order that the bandage be externally waterproof and smooth, and have a good appearance, it may be painted over with common paint as used for walls. Such a bandage (capsule) is yet more elastic than a starch bandage, and is very light, a bandage for the leg weighing but two pounds. For complicated fractures, capsules with windows and wooden splints may be prepared in the same way. Such capsules, made (for the army and hospitals) of different sizes, are preferable to the starch bandage, being

firmer, not so easily used up, and not ruined by moisture. The capsules may be fixed to the limb with rollers, leather straps and buckles, or with transverse strips.

In order to prepare a good gypsum solution, it is necessary to know, 1st. That equal parts (in weight) of water and gypsum form a mixture that *thickens in three minutes*, and becomes *hard in eight*. Linen dipped in such a mixture becomes firm after twelve minutes, although its surface remains moist for seventeen hours longer. 2d. Two pounds of water, with half a teaspoonful of thickly-boiled glue, mixed, and also with two pounds of gypsum, give a mixture thickening in eight minutes, and hardening in twelve minutes. Sack linen dipped in this mixture becomes firm after half an hour, the surface remaining moist for all the day. 3. Two pounds of water, with half a teaspoonful of glue, and two and a quarter pounds of gypsum mixed, become thick after six minutes, and firm after twelve; sack-linen fourteen minutes. The thickening of the gypsum solution does not prevent the application of the bandage. If no glue is added, the solution retains its capacity of sticking for five or six minutes longer, and for twelve or seventeen, if glue was mixed with it.

For the preparation of gypsum bandages are required:

	Water. lbs.	Gypsum. lbs.
For fractures of the forearm,	3	3
" " upper arm and leg,	4–4½	4–4½
" " neck of the humerus, about	6	6
" " clavicle and ribs,	4–6	4–6
" " thigh,	7	7
" " neck of the thigh,	8	8

If common gypsum solution is taken for the bandage, it is better in fractures, the bandaging of which takes more than five minutes, to prepare first only the half of the necessary gypsum solution. But if *glue* be added, the whole quantity may be prepared at once. In order not to lose time in the application of the gypsum bandage in hospitals and on the battle-field, there must be kept in readiness for every kind of fracture a certain quantity of old linen in the form of stockings, sleeves, drawers, then transverse strips and splints of coarse linen —all these articles must be ready in packages—as you see it here. The manipulation, as you observe, is by such an arrangement facilitated, and much time gained, which on the battle-field is of the greatest consequence.

Bandages for Fractures of the Forearm.

	Long. Inches.	Wide. Inches.
1. *A stocking or half a sleeve.*		
2. *Two* splints of *sack-linen* folded twice or thrice,	11	3
3. *Six transverse strips of sack linen*, three in each layer, surrounding the limb once and again halfways,	10	3

For Fractures of the Humerus.

1. A cut open shirt sleeve.
2. Two side splints.
   (*a*) The external back splint, 20 } In the lower end near the hand 3
   (*b*) The internal front splint, 15 } inches; near the shoulder 5 inches.
3. Transverse strips, six in each layer:
   For the forearm, 9 } 4 inches.
   For the humerus and elbow, 12–18 }

For Fractures of the Neck of the Humerus.

	Yds.	Ins.
1. A sleeve and an upper part of a shirt or of a jacket of linen.		
2. Splints and strips, as in fracture of the upper arm.		
3. A broad belt for the trunk,	3	7
4. Three transverse strips,	2¼	3

For Fractures of the Thigh.

	Inches.	
1. A cut-open stocking.		
2. Two splints of sack-linen,	18	5
3. Ten transverse strips, five in each layer:		
Below, for the foot-joint,	12	3
Above, near the leg,	16	
4. One or three transverse strips for the foot,	10	3

For Fractures of the Patella.

	Yds.	Ins.
1. A divided pair of drawers, the half cut open.		
2. A splint of sack-linen for the back of the limb,	1¾	7
3. Sixteen transverse slips, eight in each layer:	Ins.	
For the lower part of the leg,	12	4
For the knee,	13	
For the thigh,	20	
4. Thick wire for fastening the leg.		

For Fractures of the Thigh and its Neck.

	Long. Yds.	Wide. Ins.
1. A divided pair of drawers cut open.		
2. Two splints of sack-linen, three folds thick.		
An outer splint,	2	
For the upper part,		10
In the middle,		7
Below,		4
An inner splint,	1¾	
Above,		7
Below,		4
3. Sixteen or eighteen transverse strips, eight or nine in each layer:	Ins.	
Below—For the foot-joint,	12	4
For the knee,	16	
	Yds.	
Thigh and inguinal region,	1¾	
4. Two strips for the eight turns on the foot-joint,	2¼	3
5. Roller for the pelvis,	2	6
6. Two or three strips for the pelvis (spica),	4	4

Correspondence.

THE SARRACENIA PURPUREA, A REMEDY FOR SMALL-POX.

[To the Editor of the American Medical Times.]

Sir:—You have by this time, in all probability, heard something of an extraordinary discovery for the cure of small-pox, by the use of "Sarracenia Purpurea" or Indian Cup, a native plant of Nova Scotia. I would beg of you, however, to give full publicity to the astonishing fact, that this same humble bog-plant of Nova Scotia is the remedy for small-pox, in all its forms, in twelve hours after the patient has taken the medicine. It is also as curious as it is wonderful that, however alarming and numerous the eruptions, or confluent and frightful they may be, the peculiar action of the medicine is such that very seldom is a scar left to tell the story of the disease.

I will not enter upon a physiological analysis now; it will be sufficient for my present purpose to state, that it cures the disease as no other medicine does—not by stimulating functional re-agency, but by actual contact with the virus in the blood, rendering it inert and harmless, and this I gather from the fact that if either vaccine or variolous matter be washed with the infusion of the Sarracenia, they are deprived of their contagious properties. The medicine, at the same time, is so mild to the taste that it may be mixed largely with tea or coffee, as I have done, and given to connoisseurs in these beverages to drink, without their being aware of the admixture,

Strange, however, to say, it is scarcely two years since science and the medical world were utterly ignorant of this great boon of Providence; and it would be dishonorable in me not to acknowledge that had it not been for the discretion of Mr. John Thomas Lane, of Lanespark, County Tipperary, Ireland, late of Her Majesty's Imperial Customs of Nova Scotia, to whom the MecMac Indians had given the plant, the world would not now be in possession of the secret. No medical man before me had ever put this medicine upon trial, but in 1861, when the whole Province of Nova Scotia was in a state of panic, and patients were dying in the hospitals at the rate of twelve and a half per cent., from May to August, Mr. Lane, in the month of May, placed the "Sarracenia" in my hands to decide upon its merits; and after my trials then and since, I have been convinced of its astonishing efficacy.

The Indian Cup is found in swamps and moss bogs. Its capacious globular receptacles are generally filled with cool, bland water. The Cups are lined with bristles, pointing downwards, that entangle the flies that come to drink, so that few escape drowning. It is a very curious and remarkable family of plants, exclusively North American, and not to be met with west of the Alleghanies. The leaves take the form of a long bulbous tube or funnel, like the bowl of a tobacco-pipe, terminating with a hood-shaped appendage not unlike an Indian squaw's cap. The flowers, with their hard involuted crenate calyx, and fine sessile

segments, like the yellow water-lily, deep crimson stigmata, and corresponding stamina, in form and appearance are very remarkable. All of the tribe inhabit marshy grounds. The "Sarracenia Purpurea" is the most common species, and like all the beautiful things of Providence, widely diffused from Hudson's Bay to the Carolina Northern State. The root consists of numerous short radicles, fibrous and stringy, which, when powdered, have a very faint and agreeable aroma, with a taste very like the willow alkaloid, or salicin. The dose of the medicine —the powdered root—is about a dessert-spoonful, simmered in a pint of water down to half a pint; this is divided into two doses, one taken immediately, the other in six hours; no sugar should be given with it. The only functional influence it seems to have, is in promoting the flow of urine, which soon becomes limpid and abundant, and this is owing perhaps to the defecated poison or changed virus of the disease exclusively escaping through that channel. The "Sarracenia," I take reason to believe a powerful antidote for all contagious diseases, lepra, measles, varicella, plague, contagious typhus, and even syphilis, also a remedy in jaundice. I am strongly inclined to think it will one day play an important part in all these.

Yours, etc.,

Frederick W. Morris, M.D.,

Resident Physician of the Halifax Visiting Dispensary.

84 Argyle St., Nova Scotia, May 6, 1862.

THE SUSPENSION OF DR. HEWITT.

[To the Editor of the American Medical Times.]

Sir:—The following letter was received by Dr. Bennett of Bridgeport, Conn., in which city Dr. Hewitt's family resides, and as it is from an independent and disinterested witness, I beg the favor of its publication in your journal, especially as there is some absurd talk of hushing up the matter at issue. There is nothing that Dr. Hewitt or his friends desire more than that he be "Court Martialed." The ex-examination will be demanded by him.

Yours, etc., W. S. Bowen.

New York, May 16, 1862.

[COPY.]

Cincinnati, May 12, 1862.

My Dear Sir:—I have just returned from Pittsburgh and there learned certain facts in reference to a Connecticut army surgeon which I desire to communicate to you, as you both reside in, or hail from, Bridgeport—I refer to Dr. Hewitt. You may have heard that he has been suspended, and from all that I can learn—and my opportunities have been most favorable for learning the facts in his case—he is most unjustly suffering. From Gen. Halleck down, with the exception of an Indiana brigade surgeon who attacked him, the testimony is strong in his behalf. He is beloved by all. No one can call in question his bravery after his exhausting labors at Donelson and at Shiloh. His courage is in everyone's mouth, and his untiring energy commanded the admiration of all who witnessed his efforts in behalf of the wounded. I saw him at Donelson and at Pittsburgh. The Medical Directors and Brigade Surgeons were delighted with the man. The deepest sympathy is felt for him by all who know him, and no one doubts that he will come out untarnished. Indeed, it is the opinion of those most competent to judge, that his trial will be indefinitely postponed and the whole matter hushed up.

I have met the doctor a number of times, and feel that attachment to him which impels me to defend him against his enemies.

The Brigade Surgeons and Medical Directors are to unite in a petition to the Secretary of War and Surgeon-General, that his suspension be removed.

Truly yours,

[Signed] Geo. Blackman.

The Ohio State Medical Society will hold its next annual meeting at White Sulphur Springs, on the third Tuesday of June next.

Medical News.

Infanticide in London.—Infancy in London has to creep into life in the midst of foes. We hear often of the impoverished or poisoned air of close alleys and rooms unfit for habitation; and now the coroners have just told us in their official returns that sixty-seven infants under two years of age were murdered last year in the metropolis. One hundred and fifty more were "found dead," a large proportion of them left exposed in the streets; how many of these were "persuaded not to live" must remain a secret till the disclosure of all secrets. Of above fifty others we learn that they either lost their lives through the misconduct of those who should have tended them, or that their deaths are attributable, wholly or in part, to neglect, want, cold, or exposure; the mother of one was only 13½ years old. More than 250 infants were suffocated, very generally in bed; and in upwards of half these cases there was no evidence how the suffocation was caused, or the juries did not state in their verdict that it was accidental. 1104 deaths of infants in London in 1861, under two years old, were such as to demand a coroner's inquest upon them. The age is the same as in the massacre which Christendom annually remembers, but the size of this great metropolis causes it to out-Herod Herod.—*British Medical Journal.*

Diseased Cattle.—In a report just issued by the Registrar-General of Scotland, he calls the attention of the public to the fact that ever since pleuropneumonia broke out among the cattle of this country a few years since, the returns of mortality have shown that carbuncle, a disease formerly very rare, has become comparatively common. Dr. Livingstone observed in Africa that if the flesh of animals who die from pleuropneumonia is eaten, it causes carbuncle in the persons who eat it; and that neither boiling nor roasting the flesh, nor cooking it in any way, gets rid of the poison. It is true that if such cattle are ever sold for food, they are killed before they fall victims to the disease naturally, but still the poison is in them. The report suggests as a subject for inquiry whether the new form of disease which we term diphtheria may not be partially induced by the use of diseased flesh.—*British Medical Journal.*

Effects of Henbane.—Dr. Donovan makes some rather startling remarks on the inefficiency of henbane as usually prescribed: his experiments were made on himself and others. He began with ʒj. doses of the tincture, and got up to ʒv. and ʒvj., and even swallowed an ounce at a dose without observing any remarkable effect: he also tried ʒj. doses, at intervals of two or three hours, on persons variously affected, but could not discover any consequences. He prepared the tincture himself, both with the wild and the cultivated plant: in all cases the results were the same.—*London Med. Review.*

New Army Hospital in Philadelphia.—A new army hospital is in process of erection in Philadelphia. It is situated between Mill Creek, near the Baltimore turnpike road, and Spruce st., and is to consist of twenty-one one-story buildings, arranged in the form of a parallelogram, in the centre of which will be a building for the surgeons. Each ward will contain 50 beds.

Wounds of Lower Extremities in Battle.—It is stated that at the battle of Pittsburgh Landing the majority of the wounds in the Federal troops were situated in the lower extremities. This is supposed to be due to the repeated order of Gen. Beauregard to fire low, and cripple instead of kill, as it required two well men to care for each wounded one.

Brigade-Surgeons.—Dr. J. J. Hayes, late of the Arctic expedition, J. T. Heard of the 16th Mass. Regt., and Dr. Baxter, of the 12th Mass., have been promoted to the rank of Brigade-Surgeon.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 12th day of May to the 19th day of May, 1862.

Deaths.—Men, 56; women, 81; boys, 113; girls, 89—total, 369. Adults, 167; children, 202: males, 199; females, 170; colored, 5. Infants under two years of age, 131. Children reported of native parents, 18; foreign, 160.

Among the causes of death we notice:—Apoplexy, 9; infantile convulsions, 24; croup, 10; diphtheria, 8; scarlet fever, 13; typhus and typhoid fevers, 7; consumption, 61; small-pox, 5; dropsy of head, 10; infantile-marasmus, 17; diarrhœa and dysentery, 2; inflammation of brain, 17; of bowels, 13; of lungs, 24; bronchitis, 5; congestion of brain, 9; of lungs, 6; erysipelas, 2; whooping cough, 3; measles, 2. 242 deaths occurred from acute diseases, and 37 from violent causes. 245 were native, and 124 foreign; of whom 74 came from Ireland; 4 died in the Immigrant Institution, and 49 in the City Charities; of whom 17 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

May, 1862	Barometer. Mean height.	Barometer. Daily range.	Temperature. Mean	Temperature. Min.	Temperature. Max.	Difference of dry and wet bulb. Thrm. Mean	Difference of dry and wet bulb. Thrm. Max.	Wind.	Mean amount of Cloud.	Humidity. Saturation, 1000
	In.	In.	.	.	.	.	.			
11th,	30.10	.36	59	50	67	8	11	NW. to SW	1	533
12th.	30.14	.10	62	48	75	9	14	N.W.	1	580
13th.	30.50	.10	60	50	71	7	11	S.W.	5	600
14th.	30.00	.04	60	50	70	7	12	N.E.	3.4	600
15th.	30.10	.10	60	52	70	9	14	N.E.	2	510
16th.	30.15	.10	66	57	75	7	11	NE. to SE.	3	620
17th.	30.00	.20	70	60	81	8	11	NE. to SE.	.07	600

REMARKS.—11th, Fine day; wind fresh A.M., weather hazy P.M. 12th, Fine day; wind fresh A.M., weather hazy P.M. 13th, Clear A.M., cloudy P.M., very light rain eve. 14th, Variable A.M., clear P.M., wind fresh all day. 15th, Clear A.M., cloudy P.M., wind fresh A.M. 16th, Fog A.M., clear P.M. 17th, Clear all day, wind fresh P.M.

MEDICAL DIARY OF THE WEEK.

Monday, May 26.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Thomas, half-past 1 P.M.
- Eye Infirmary, 12 M.
- Obstetric Section, 8 P.M.

Tuesday, May 27.
- Bellevue Hospital, Dr. Loomis, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
- New York Hospital, Dr. Markoe, half-past 1 P.M.

Wednesday, May 28.
- New York Hospital, Dr. Griscom, half-past 1 P.M.
- Bellevue Hospital, Dr. Sayre, Is. Hos., half-past 1 P.M.
- " " Dr. Flint, Is. Hos., 3 P.M.
- Eye Infirmary, 12 M.
- New York Academy of Medicine, 8 P.M.

Thursday, May 29.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Barker, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Friday, May 30.
- Eye Infirmary, 12 M.
- Bellevue Hospital, Dr. McCready, half-past 1 P.M.
- New York Hospital, Dr. Markoe, half-past 1 P.M.

Saturday, May 31.
- New York Hospital, Dr. Griscom, half-past 1 P.M.
- Bellevue Hospital, Dr. Wood's Clinic, 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

SPECIAL NOTICES.

The Annual Meeting of the Connecticut Medical Society *will be held at the Franklin Hall in the City of Bridgeport, Wednesday, May 28th, at 11 A.M.*

Section of Surgery and Surgical Pathology.—*The Stated Monthly Meeting of the Section of Surgery and Surgical Pathology, will be held at the house of the Chairman,* Dr. James R. Wood, *No. 2 Irving Place, on Friday Evening, the 23d inst., at 8 o'clock P.M. Subject for discussion, "Tracheotomy in Cynanche Trachealis."*

Wm. H. Davol, M.D., late Physician to L. I. College Hospital, Brooklyn, removed to St. Paul, Minn.

References—C. L. Mitchell, M.D., T. F. Mason, M.D., Prof. E. N. Chapman, M.D., of Brooklyn; Prof. Austin Flint, M.D., Prof. B. F. Barker M.D., of New York.

To Physicians.—For Sale: a large county and village practice with a half interest in a drug house, in Greene, Chenango Co., N. Y. For particulars inquire of M. M. Wood, Greene, Chenango Co., N. Y.

Surgeon-General's Office,
Washington, May 10, 1862.

An Army Medical Board will assemble in Washington, D. C., on the 1st of June next, for the examination of applicants for admission into the Medical Corps of the Army. In addition to the ordinary requirements of moral character, medical and surgical knowledge, good academic education, and sound physical condition, the applicants must be familiar with the principles of hygiene and the conditions necessary to the health of the troops in hospitals, camps, and transports.

Applications must be addressed to the Secretary of War, through the Surgeon-General; must state the residence of the applicant, and the date and place of his birth. They must also be accompanied (references will receive no attention) by respectable testimonials of his possessing the moral and physical qualifications requisite for filling creditably the responsible station, and for performing ably the arduous and active duties of an officer of the Medical Staff.

Applicants must be between *twenty-one* and *twenty-eight* years of age.

No allowance is made for the expenses of persons undergoing these examinations, as they are indispensable prerequisites to appointment; but those who are approved and receive appointments will be entitled to transportation on obeying their first order.

There are now, and soon will occur, several vacancies in the Medical Staff.

Notice of Removal.

Dr. Hanbury Smith

has removed his

LABORATORY AND SALESROOM TO

808 BROADWAY, Opposite Eleventh Street.

Dr. Nœggerath

has removed his office to

125 WAVERLEY PLACE.

Dr. Julius Homberger,

Speciality: Diseases of the Eye,

has removed to

24 West 12th Street.

Office Hours: From 9—11 A.M. " 5—6 P.M.

John W. Shedden, Apothecary, 363 Bowery, cor. 4th St.

Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

P. W. Bedford,

PHARMACEUTIST,

removed to

745 *Sixth Avenue, near Forty-fourth Street,*

Opposite Sixth Avenue Railroad Depot.

NEW BOOKS.

Sent Free by Mail on Receipt of Price.

Appia (P. L.) The Ambulance Surgeon, or Practical Observations on Gunshot Wounds. 12mo. Edinburgh, 1862. $1.50.
Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Clinical Essays, by B. W. Richardson, M.D. 8vo. London, 1862. $2.00.
Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Gmelin (L.) Hand-Book of Chemistry. Vol. I. 2d Edition, revised. 8vo. London, 1861. $3.25.
Baillière Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Epilepsy: its Symptoms, Treatment, and Relation to other Chronic Convulsive Diseases, by J. R. Reynolds, M.D. London. $3.25.
Baillière Brothers, 440 Broadway, N. Y.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians* (*principally country Physicians*) *Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bonrbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the Journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyoscianus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.
SESSION 1860-61.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Lecture VIII.—Part III.

Urinary and Sexual Organs; Catarrh of Bladder; Incontinence of Urine; Ischuria; Balano-posthitis; Catarrh of the Vagina.

The urinary and sexual organs have also been said to suffer from the consequences of dentition. There are particularly three affections connected with pathological conditions of the bladder, which, in our text-books, are frequently attributed to this physiological process, viz. catarrh of the bladder, incontinence of urine, and ischuria.

Catarrh of the bladder is by no means so rare a disease in early age, as many of our authors maintain. Traumatic injuries, the presence of calculi, abuse of cantharides, and preceding diseases, such as typhoid fever, cholera, and variola, are admitted to rank amongst its causes. All those cases, however, which do not come under these heads, have very frequently been attributed to dentition, as the always ready scapegoat of a deficient diagnosis. Now, Civiale, one of the best authorities on the diseases of the urinary organs, has directed the attention of the profession to the fact, that the muscular layers of the infantile bladder are less active than in advanced age; that the inert condition of the organ will, therefore, give frequent rise to retention of urine, and that carbonate of ammonia will, consequently, be formed in the bladder, giving rise to irritation and injection of the mucous membrane and its symptoms, viz. pain in the region of the bladder, through perineum and urethra, and the frequent and scanty emission of a dark-colored, or mucous, or bloody urine; symptoms which are sometimes even complicated with dilatation of the bladder, fever, symptoms of typhoid fever or peritonitis, emaciation, sopor, vomiting, and collapse.

The cases explained by the physiological condition of many an infantile bladder, as shown by Civiale, are by no means rare or simple. They are usually not attended with the same danger as those depending on traumatic injuries or the presence of irregularly shaped calculi; but they generally last longer than such as are produced by cantharides, and frequently prove at least as obstinate as those occurring in the convalescence from typhoid fever, cholera, or variola. Nor is the treatment always successful in a short time, or permanent, for the condition of the muscular layers cannot so readily be changed as the momentary anatomical lesion depending upon it. In the majority of cases, however, the administration of alkalies, particularly bicarbonate of soda, or in very chronic cases gallic or tannic acid, uva ursi, or buchu, will suffice to restore both the normal condition of the mucous membrane, and the normal emission of the urine.

By incontinence of urine I do not mean complete paralysis of the bladder involving both the expelling muscular layers and the sphincter. This latter affection results from a central cause, giving rise to constant dribbling of urine, both day and night. Now, by this symptom, it will be easily diagnosticated from the affection in question, which, indeed, compels children to urinate frequently during the day, but is best recognised by their wetting their beds while asleep. It is more frequently observed in males than females, sometimes up to the tenth or twelfth year. I know, indeed, cases that have lasted up to adult age.

Such cases prove, without further remarks, that they need not be, and generally are not, the results of bad habits; not to speak of the fact that many such cases of incontinence of urine, or enuresis, occur in children affected with manifest symptoms of scrofula, or rachitis, without the presence of any change of the chemical composition of the secretion. As a general rule the cause of an individual case—and the etiology of the disease which interests us most here in the attempt of rightly estimating the assumed influence of dentition—must be sought for in one of the following circumstances: either sleep is too sound, and here lies the explanation of the fact that very often children will wet their beds in the first part of the night; or the perceptive power of the bladder is too little; or its sensibility is too great in proportion to the soundness of the sleep, the sensitive nerves influencing the motory ones by reflex action. The latter cause appears to be very frequent; if nothing else were going to prove this assertion, it would be upheld by the speedy success obtained in the vast majority of cases, by the internal administration of belladonna. A quarter or a third of a grain of the alcoholic extract of belladonna, given at bedtime, or two or three times a day, will cure almost every case of incontinence of urine (and, as I have found, of fæces), without affecting the pupils which in the adult are the first organs influenced by this medicament, but are rarely so in children. It may be necessary to give the remedy for a week or two, in sufficient doses, but I have seen a number of cases of long duration which were speedily relieved and permanently cured by a few doses. Other cases, according to their etiology, would require the use of nux vomica, or the constitutional treatment appropriate to scrofula, rachitis, or anæmia.

Ischuria, or retention of urine, is not unfrequently seen in infantile age, although dangerous cases are rare. The patients are generally such as suffer also from flatulence and colics; the symptoms attending ischuria, and those observed in flatulence, as pain, screaming, violent adduction of the thigh to the abdomen, being very similar to each other. Percussion of the vesical region, however, will frequently yield a correct diagnosis. The causes are very various, from malformations of the urinary organs, or permanent fœtal condition of the kidneys, down to the presence of vesical calculi; spasm of the bladder, and diarrhœa; or reflex action depending on constipation, meningitis, the presence of worms in the intestinal canal, and they say dentition.

Catarrhal affections of the sexual organs have also been attributed to dentition—balano-posthitis, the hyperæmia, erosions, and the over-secretion of the surface of the glans penis, which usually is the result of uncleanliness only. The fatty secretion of the inner surface of the prepuce requires, especially where it is narrow, covering the whole of the glans, constant attention, its frequent removal being the only preventive against decomposition and its local consequences. Masturbation, either a bad habit contracted by the manipulations of injudicious nurses, or in consequence of worms irritating the mucous membrane of the intestinal canal, are often among its proximate causes.

Catarrh of the vagina, rarely complicated with catarrh of the urethra, is even of more frequent occurrence than balano-posthitis; the complication alluded to being sometimes the effect of gonorrhœal infection. The superstition of gonorrhœa being removed by the contact with an intact hymen has not yet entirely died out. Want of cleanliness, the presence of foreign bodies, peas or beans, or oxyurides vermiculares emigrating from the rectum into the vagina, moist dwellings, liability to catarrhal affections in general, anæmia, and scrofulous or tubercular disposition, are very frequently recognised as the direct causes of the affection; so regularly, indeed, is there a distinct cause to be found that, up to this time, I have not been compelled to resort to dentition as the mysterious source of this evil. Nor is there any reason for the belief that there is a connexion between it and the above-mentioned affections.

Original Communications.

SURGICAL SERVICE OF THE NAVY IN TIMES OF WAR.

TRANSLATED FROM THE FRENCH OF

DR. JULES ROCHARD,

SURGEON IN CHIEF OF THE FRENCH NAVY.

(*Continued from page* 289.)

AMPUTATIONS.

THERE remains a last part of surgery to be mentioned, namely, Amputations, which occur as frequently on board ship as on land.

They can be subdivided into three classes:—

1st. After a complete, or nearly so, carrying away of a limb by a large shot.

2d. In complicated fractures caused by pieces of shells, or splinters of wood or iron.

3d. In gunshot wounds, accompanied by fractures and ruptures of the arteries, caused by musket or rifle balls.

In the first case no hesitation can be allowed. Amputation should be performed immediately; that is, as soon as the stupor has been dissipated, or in any case within twenty-four hours of the accident.

It is not so easy to determine in relation to complicated fractures and gunshot wounds. The difference between these two descriptions of wounds is important. The apparent gravity of the first contrasts with the apparent harmlessness of the second. Fractures produced by the blow of a large body, are like those which are ordinarily seen in hospitals. They are accompanied by much swelling, a rapid loss of blood, and considerable *ecchymosis*. The wounds having a large surface give them the appearance of being more dangerous than they really are. In gunshot wounds, on the contrary, the results are hidden; the broken bones and severed articulations are not seen; there is no remarkable change in the appearance of the limb. Two small openings, slight bleeding, and but little pain, do not seem to endanger the life of the patient, and hardly to call for the necessity of amputation. It requires the whole weight of the conviction given to us by experience to force us to attend to the latter cases in preference to the others.

As a general rule, complicated fractures seldom call for the sacrifice of the limb. In marine arsenals, where the larger part of the work requires the employment of many men when enormous masses are being continually moved, these accidents form the larger part of the hospital duties. Experience has taught us to rely upon the strength of nature and the efficacy of continued irrigation. To necessitate amputation, the destruction of the skin, the *abrasion* of the muscles, the crushing of the bones must be extreme, and they must be accompanied by the wounding of the principal blood-vessels. Such wounds will, without doubt, take a long time to cure. For instance, in fractures of the leg it will often be six months and even more before the patient can walk; and even then when he leaves the hospital, in looking at the deformed limb, which swells and changes color after being for a few hours in a vertical position, we ask ourselves if we have done a real service to the patient, and whether it would not have been preferable to have saved him so much suffering, and have amputated at once. Months, and often years, are necessary to judge of the results. We can then see unhoped-for transformation. The bony soldering has diminished in size, the muscles have regained their shape and strength; the articulations, stiffened by a long disease, have recovered by exercise their movements. The limb cannot be recognised, the patient has forgotten his suffering, and the surgeon congratulates himself on his forbearance. To sum up, when the wounded can be properly attended to, *abstinence* should be the rule, and amputation the exception in cases of complicated fractures.

The same rule does not hold good in gunshot wounds. When a ball strikes a long bone it splits as well as breaks it. A large number of pointed splinters enter the flesh and produce interminable abscesses and suppuration. Often the unseen cracks extend to the neighboring articulations, full access is given to the air, and often pieces of clothing and the ball remain in the wound. These disorders are always more extensive than an external examination would lead us to suppose. Surgeons appearing for the first time in the field are often led into a fatal sense of security. Those who have had much experience insist on the seriousness of these wounds, and of the necessity of immediate amputation in most cases. Such was the practice of the leading surgeons in the wars of the Consulate and the Empire. When a long peace had made us forget the precepts of experience, the hospital surgeons denounced this as *wholesale surgery*. The contrary doctrines took root little by little in the schools, and when war was recommenced, surgeons went into the field with the conservative ideas which they had adopted in their studies. But facts soon modified their views, and we see them nowadays bow before the necessity of active measures, and come back in great part to the practice of their predecessors. The reaction is not complete, and amputations are performed less often than they were. Conservative surgery has taken a large part in the wars of the East and of Italy, and the distinguished surgeons who followed our armies only protest against its exaggerations.

The wounds of the upper limbs rarely call for amputation; it can be dispensed with in cases which seem to require it, if the surgeon has the hardihood to enlarge the wounds, to remove all splinters, and to resect the broken ends of bones or fractured joints. It is needless to mention the use to which a limb can be put even if shortened and deformed. A mutilated hand, consisting only of the thumb and little finger, can be of more service than the most ingeniously contrived artificial hand. This rule does not hold with respect to the lower limbs. The bones being larger, the muscles stronger, and the elements of vitality less, wounds to them are more serious, and their form, length, and solidity must be retained, so that they may perform their functions. It is on this point that definite rules should be recognised, and on no other point is there more variance.

Larrey, Rebes, and Baudens, insist that all fractures of the thigh should be amputated. Sedillot, Scrive, Guyon, and Legonest, are opposed to immediate amputation. M. Legonest cites twenty-four cases of the upper third of the thigh cured without amputation; M. Roux cites twenty-one from the army of Italy under his care at the Hospital of Saint Mandrier. It is pretty well decided that the wounded can survive these accidents, but are nearly sure to succumb to the operation.

However, these are the opinions of military surgeons only. They cannot be considered as final with the naval surgeons, as the circumstances are different. With the first the number of the wounded often surpasses all the means of properly attending to them, at their disposal; whereas the naval surgeon is always abundantly supplied with all requisites. The army surgeon is often called on to perform operations which could be avoided under more favorable circumstances, such as are to be met with on board ship. We are therefore enabled to practise conservative surgery more than our confrères are, and are allowed to infringe on some of their principles.

In the foregoing we have supposed that the vessel was in good condition after the fight, and that the weather was favorable. If it were stormy, and the necessity of closing the portholes prevented the ventilation of a deck crowded with wounded, dampness, want of light, and the vitiation of the air would soon develop the most grievous complications, and compromise the success of the best of treatment. This is what happened in the Crimea in 1854–5, and which will happen wherever the wounded have to suffer being crowded together, in

dampness and cold. Want of space is the principal difficulty which naval hygiene has to overcome, and though great when caused by sickness the danger is much augmented when the patients are wounded. To the ordinary effect of the vitiation of the air, are added the emanations which arise from abundant suppurations from large wounds, often tainted with gangrene. On shore, notwithstanding all the resources of ventilation, the wards of the hospitals are not entirely free from danger of purulent infection, and cases are even occasionally seen of *pourriture d'hôpital.* Then, terrible dangers are more likely to happen on board ship, to which may also be added ship fever. They are liable to break out at any moment. During the short passage from the Crimea to Constantinople several of the ships were affected, and cases can be found by looking further back, in which they were developed in a still shorter space of time. The fear of these scourges should always be before the surgeon's eyes, and everything should be done to prevent them.

When the weather precludes the possibility of opening the port-holes, wind-sails should be rigged at all the hatches that can be used for this purpose, braziers should be lighted at the end of the room, and pans filled with chloride of lime, slightly wet, should be placed under the beds of these patients whose wounds are most offensive. The utmost importance must be attached to a rigorous cleanliness, which must be done without having recourse to much washing. Cloths should be spread on the deck during the dressings and during meals. Lint, which has been used, small pieces of rags, etc., should be immediately thrown overboard; bandages should be placed in salt water and carried away, to be washed afterwards in fresh water. The pails used for irrigation should be often emptied and cleaned; and if the wounded are on board for any length of time, the partitions and ceilings should be whitewashed occasionally.

Whatever may be done, the re-union of a large number of wounded cannot but be attended with danger. They must be removed as soon as possible. When the urgent operations have been performed, the end of the hospital which has been reserved for this purpose can be placed at the disposal of the worst cases. Those who can leave their beds should not be allowed in the lower battery during the day-time; they should be on deck if the weather is fine, or in the upper battery where their presence would not interfere with the crew. If necessary, those who cannot yet walk, should be carried there. Exposure to the air, the vivifying effect of the sun, and the sight of their comrades, will produce the happiest effect on their moral and physical state, and their absence from the hospital be a great advantage to those left there.

The diet of the wounded should be the object of special attention. The resources are rather limited, but, except after a long cruise, the provisions will not have had time to spoil, and a full stock of refreshments will be on hand. As the conditions of the wounded after a fight are peculiarly debilitating, a substantial and reparative regimen is the best means of preventing the diseases to which they are liable. In France the wounded are not sufficiently kept up. The English do not follow this course, and are the better for it. The surgeon must bear in mind that his patients are robust men, accustomed to substantial rations, and that when wounded they should be well fed, and should be allowed to eat as much as they want, as soon as the traumatic dangers are passed. Usually, not enough is known of the necessity of repairing the constitution after it has been reduced by severe lesions. It is not necessary to add, that all the ordinary rules of hygiene should be strictly attended to, and that the wounded should be sent on shore at the earliest possible moment.

Japanese Men of Science.—The scientific men attached to the mission visited the Military Hospital of the Val-de-Grâce and the Ecole de Médicine, and were much delighted and edified.

DOUBLE MORBUS COXARIUS.

EXTENSIVE ULCERATION OF BONE, WITHOUT CREPITUS OR MARKED GENERAL OR LOCAL SYMPTOMS.

BEING THE HISTORY OF A SPECIMEN PRESENTED TO THE N. Y. PATHOLOGICAL SOCIETY, AT ITS MEETING, NOV. 27, 1861.

By E. KRACKOWIZER, M.D.,
OF NEW YORK.

Stewart Gilmore, 5 years and 3 or 4 months old, had always been a delicate child—pale, thin, very nervous, never a hearty eater, his teeth decaying as fast as they appeared. About fifteen months before he died his parents noticed something singular in his walk, and attributing it to bad habit, administered frequent admonitions. They are not able now to remember fully in what consisted its peculiarity; all they say is, that he walked with a halt, and when he had occasion to stoop for anything, he would not bend over, but go down first on his right knee, thereby enabling himself to reach objects on the floor. Soon he commenced to complain about pain in the right knee. The family physician thought first it was rheumatism, then again "growing pains." After a while he pronounced it hip-disease. As for systematic treatment, it seems neither to have been sought nor to have been applied, the trouble referred to remaining about stationary. Yet it told on the general condition of the child so far, that he grew thinner and had less appetite. His sleep seems to have been satisfactory; at least the parents do not remember that he gave that characteristic shriek, common in inflammations of the larger joints, very often.

After this condition of things had lasted about nine months, some time in the beginning of February, 1861, on a Sunday his mother took him to church. He seemed to complain more, and to walk with more difficulty on his way home. Tired he lay down beside the stove, and after getting out of his nap he used the right leg no more. For the next three months all his locomotion was performed with the left leg, the right one barely touching the ground for a moment, while he would keep his balance at the same time by taking hold with the hands of surrounding objects, or pushing his hands against the walls.

During the month of May he lost the use of his left leg also. It is somewhat doubtful, whether the trouble on the left side commenced suddenly or by degrees. I will state here what I could gather from the narrative of the mother in this respect. Some time in the latter part of April, following the advice of the family physician, the child was brought to the Clinique of the College of Physicians and Surgeons for three subsequent Mondays. The mother remembered that Dr. Markoe had remarked on the last Monday that there was double hip-complaint, and advised her to put the patient under Dr. Davis's treatment.

On the subsequent Monday Dr. D. examined the boy, pronouncing the disease hip-complaint of the right side. He bade the mother return next Thursday, when he would apply his apparatus. But already on Wednesday the mother found, to use her words, "in the morning his left leg as stiff as the right one." She sent for her physician to learn what she ought to do. He told her it was useless now to get the apparatus, and nothing could be done.

Nothing was done accordingly for a couple of weeks, when the boy was presented at the German Dispensary, 132 Canal st., June 18, 1861. After he was divested of his dressing it was found that there was an utter impossibility either to stand or to walk, as both legs were kept constantly flexed in the hips as well as in the knees at about a right angle. If the boy were well held under the shoulders, and so let down on his feet, he would exhibit the utmost trepidation, and when in this situation the support was seemingly taken away from him, he would rather let the heels glide away from the floor as an instinctive preparation to come down on his buttocks, than permit a further flexion in the knee or hip-joints.

When put on his back the existence of coxitis of the right side in the second stage was very evident. There was no absolute rigidity of the joint, passive motions to a small extent not being transmitted to the pelvis; but any wider excursions imparted to the extremity, mainly abduction and extension, were immediately answered by corresponding motions in the lumbar part of the spine. These motions caused pain. On the left side the extent of articular motion produced by passive motion was considerable, and it was not so clear whether the extreme nervousness of the child was not the cause why they might not have been carried to a normal degree. But repeated examinations at different times when the attention of the patient was called away settled the doubt in favor of inflammation in the left hip-joint too. There was no swelling around the joint, and under the influence of chloroform passive motions elicited no crepitus. The pelvis was somewhat oblique in two aspects, the ant. sup. spine of the right ilium being higher and somewhat further back than the one of the left side. To bring both spinæ to the same level it was necessary to increase the flexion and adduction of the right thigh by carrying it under an angle of near 40° over the left one.

On June 25th extension was made use of by means of adhesive-plaster straps and weights attached to cords running over pulleys fixed at the footboard of the bedstead. Under this treatment the general condition of the child improved very rapidly, as also the local improvement became apparent. His sleep became good, the hectic fever and night-sweats ceased, his appetite returned, and he was in excellent spirits. With the weights on his legs it was his delight to pull them towards him vigorously and let them go again, and during these motions the pelvis participated very little. The weights removed, the active motions and to a lesser degree the passive ones gave pain. After he had been about four weeks under this treatment a swelling commenced behind and superior to the left trochanter, which was plainly fluctuating, and on the twelfth of August had acquired about the size of a lemon. Chloroform was administered, and by puncture with a trocar one ounce and five drachms of a liquid was drawn off, consisting partly of a glairy substance, partly of dirty pus with shreds of coagulated lymph, not very intimately mixed, but all these constituents issuing pretty separately through the canula. Passive motions gave a very distinct bony crepitus, leaving no doubt of ulceration of the joint and perforation of the capsule. The wound was closed with adhesive plaster, and healed by first intention, no reaction, general or local, setting in. The child was then going on as well as ever. Swelling formed again, only a little slower, and puncture was repeated on September 14th. One ounce of unhealthy pus was withdrawn. Crepitus the same. Effect the same.

I must state here that both these times, when the patient was under chloroform, the right joint was examined with care, with a view to detect crepitus. None was found, either by me, or by Drs. L. A. Voss and A. Jacobi, who were present.

It may surprise some of the surgeons why I confined myself to puncturing the abscess, and not laying it open widely with the knife. My reason was this:—From the general improvement of the patient, the absence of pain by pressure, the fair degree of active motion while extension was kept up by the weight, I was led to suppose that the ulcerative destruction in the joint was not very extensive. I thought that by continuing the treatment then commenced, and giving so fine results, that a healthy reparative process might spring up in the joint, while I had no misgivings but that under such circumstances the secondary abscess would, by repeated puncture and injections either of a solution of corrosive sublimate or of iodine, be obliterated. Besides, cutting the abscess open would have interfered with the application of the counter-extending strap of Davis's apparatus, which I thought the time had come to apply. At any rate the indication to cut into the abscess did not seem to me to be so very urgent.

I applied Dr. Davis's splint on both sides September 28th. The boy was delighted with being enabled to be around, and out of bed in day-time. He enjoyed the scenes on the street by leaning out of the window, and supporting himself to a certain degree with his feet. When well-steadied by being held under the shoulders he made steps through the room, although in this proceeding the motions were mainly performed in the spine; at least I could not satisfy myself that there was any motion in the joints.

Having satisfied myself that the parents understood perfectly the management of the apparatus I did not see the boy so often. I paid him a visit October 15th. That day he went to bed as well as ever. He awoke about 10 P.M. with a loud scream, and being frantic, could hardly be pacified. He passed a very restless night. On October 16th he asked to have his splints on and be dressed. He vomited up his breakfast, was very irritable and acted strangely. There was no marked change in his condition during the three following days. There was an occasional emesis, a passage from the bowels every day, and sometimes the water would be passed involuntarily.

October 22d.—I called as usual after the expiration of one week, not being informed of the change that had come over the patient, and found him in bed, this being the first day since his recent sickness when he was unable to rise at all. He had a silly expression of countenance. Head somewhat hotter. Pupils dilated—contracted under stimulus of light, but immediately dilated again. A little strabismus, alternating, but more with the left eye. Mind very dull, answers very slow and short, but correct.—Pulse 140, small, regular. Bed wet with urine passing involuntarily. Hands constantly pulling the genital organs. Had had no passage for three days. Action of the muscles of the upper extremities unsteady, tremulous, without plan, spastic contraction of the flexors during quiet slightly prevalent. Oct. 23d.—Was not conscious, same symptoms, muscular tremor more marked. Continued so, the main symptoms not varying till October 31st, when he died, growing weaker and weaker.

Never had general convulsions, nor paralysis. Urinary secretion very free. Pulse was only for two days (Oct. 25th and 26th) slightly irregular. Four days before he died he was conscious, sometimes for longer intervals, understanding and answering questions of the plainest sort, about food and drink, correctly, with a thick gurgling voice.

Post-mortem examination, Nov. 1st, thirty hours after death.—Calvaria and dura mater normal. No serum in the arachnoidal sac; pia mater moderately vascular; gyri cerebri not flattened. On the top of both hemispheres, and more so on their minor surfaces, the pia mater was studded with a great number of tubercules, solitary and in groups, either free or imbedded in layers of yellow coagulated lymph, exuded under the arachnoidea, along the course of the veins of the pia mater. Tubercles scarce on the base of the brain, and still more so at the commencement of the fossa Sylvii. Substance of the brain healthy. Lateral ventricles *not* dilated, not more than the usual quantity of serum. Endyma *normal, no softening* of the adjacent brain-structure.

The *pelvis* with upper part of the thighbones was removed entire from behind, without opening the peritoneum. The glutæus medius and maximus of the left side were lifted up and protruding from pus accumulated beneath them. On cutting their fibres parallel with the crest of the ilium, a large abscess was found between the glutæus medius and minimus, reaching backwards to the incisura ischiadica major, and forwards and downwards to the anterior aspect of the thigh, the matter burrowing between the tensor fasciæ and sartorius muscles and the head of the rectus femoris. The walls of the abscess were partly vascular with deposits of coagulated lymph firmly adherent;

partly they were constituted by the interstices of the muscles, which the burrowing matter had dissected.

On the anterior border of the glutæus minimus muscle, where it crosses the origin of the rectus femoris from the spina ilei anterior inferior, there was an opening, exteriorly bordered by a sharp, falciform spur of the fascia of the glutæus minimus. This sort of slit was blocked up by a shred of dirty-yellowish grey lymph. On this being withdrawn, and the probe inserted, it struck the bare bone in the direction of the joint. The capsular ligament being divided parallel with the rim of the acetabulum, and thick, dirty, crumous pus being wiped away, the joint was discovered extensively destroyed. The synovial membrane was mostly gone, or transformed into a pulpy substance, easily scraped off with the back of the knife. The ligamentum teres mostly destroyed, but still with some separated filaments connecting the head with the acetabulum.

The head of the femur was mostly denuded of its cartilage, of which here and there were a few detached patches adhering loosely to the bone. The head had altered its spherical shape to a conoid one. Its spongy substance was bare, vascular, and soft. There was the same destruction on the acetabulum, the floor of which had been eaten away by ulceration, so that a probe dipping in its ragged bottom struck immediately on the exterior surface of the pelvic fascia. The same condition of things, although not so far advanced, could be observed in the right joint. The capsular ligament in this was ulcerated in front, and the matter had commenced burrowing in the direction of the tendon of the ileo psoas-muscle. The ligamentum teres completely gone. The floor of the acetabulum deeply ulcerated, on one point very near its perforation. The cavity of the joint, besides pus, contained a quantity of coagulated lymph, which, spread somewhat in the shape of a membranous layer, intervened between the head and the acetabulum. The bony destruction mostly marked on the upper and outer circumference of the acetabulum.

Now this case is certainly very instructive for practical surgeons. Ulceration of the bones composing the left coxal articulation was known to exist. On the right side it was not detected at the last examination.—September 14, six weeks before death. I suppose that this jelly-like mass, intervening between the bones composing the joint, although they were bared of their cartilages, prevented the friction of their rough surfaces.

If, then, it is not the fault of the examination—and I think I used all proper circumspection, expecting to get this symptom; and Drs. Voss and Jacobi used equal care, and did not find it—the lesson conveyed would be *that there may be extensive ulceration of bone in the joint, and yet no crepitus.*

I will add here, that although the destruction is far greater on the left side, the crepitus was not very harsh, and the head of the bone, while rotating, had to be pushed firmly into the acetabulum to get it at all times.

Additional information which I get by this case, is this: *There may be very great destruction in the joint, and yet the local as well as the general symptoms may be very mild.*

You remember all I have said about the rapid improvement in the general condition of the patient, by the treatment adopted, the absence of pain, the ability of active articular motion while extension was kept up by the weights, the possibility to support the body to a very limited extent while *Davis's* splints were on, and how I was misled by all that to imagine the disease not at all of such a grave character, as the specimen in fact reveals it to have been.

Now I would ask any surgeon of ordinary experience and judgment, whether in looking at this condition of things he supposes it possible that the progress of the disease could have been arrested; and whether there can be a doubt in anybody's mind, if the actual state of affairs had been known, it would not have been imperative to cut down on the joint, and remove all such obstacles as interfere with the free discharge of matter and keep up a constant irritation—in one word, to resort to resection of the joint?

Many surgeons who do adopt this operation, do not consider the existence of bony crepitation or suppuration as fully establishing the indication to make it, when the general condition of the patient is still good, and I belonged to that class. This case teaches, how well the constitution may bear up against the local mischief, and yet the articular destruction be so great as to be almost beyond surgical help, as the perforation of the acetabulum demonstrates.

This specimen further shows that circumstances may occur where even probatory incisions fail to reveal the true condition of the joint. You would have undoubtedly opened the abscess behind and upwards of the trochanter major. But with your probe, or your finger, you would have found it impossible to get at the communication between the abscess and the joint. I, for one, am pretty much done following longer the teaching of those surgeons whose "conservative surgery" rather tends to conserve the disease than the patient; and I am convinced that the best conservative surgery is the one which, breaking away from the prejudice that disorganized joints—which, in fact, are no more joints—must be considered in any other light than abscess or necrosis in the diaphysis of the bones, to guide our surgical action, sacrifices a joint to save the patient and the limb.

Reports of Hospitals.

N. Y. STATE VOLUNTEER HOSPITAL.

SUCCESS OF THE TONIC AND STIMULATING PLAN OF TREATMENT.

For a year past, one of the three buildings constituting the New York Hospital has been appropriated to the sick and wounded Volunteers of the State. Until within the past two or three months it has been under the medical superintendence of Dr. C. R. Agnew, assisted by Drs. McKee and Hogan. The Institution was then, to all intents and purposes, a distinct Hospital under the direction of the State authorities. Since, however, the resignation of Dr. Agnew, the Volunteer Hospital, as such, has ceased to exist, and the soldiers are now received by the New York Hospital according to special contract.

During the existence of this hospital, a large number of cases were treated, embracing principally measles, typhoid fever, pneumonia, and pericarditis. A record of the general practice of the institution as furnished by Dr. Hogan, the resident physician to the Hospital, is certainly of great interest to every practitioner of medicine, and serves to illustrate in a very marked degree the value of the supporting plan of treatment, even in those diseases characterized by severe inflammations.

The number of cases of measles was very considerable. The patients were generally admitted with the rash pretty well developed. The type of the disease was asthenic, and where pneumonia did not exist as a complication, bronchitis was generally present. In five of the cases purpura existed as a complication, coming on in each instance during the third day of the rash. The expectant treatment was followed out to the fullest extent, and generally at the end of a fortnight the patient was discharged cured. There were no fatal cases of this disease. The character of the eruption in every instance was well marked.

The cases of pneumonia were quite numerous, and were for the most part caused by exposure to cold and wet. This disease was received in almost every stage, from the very commencement of the initiatory symptoms to the full development of hepatization. It could not be ascertained that the type of the disease bore any relation to the vigor of the constitution, as it was in the main asthenic. The interesting point of the treatment consisted in the fact that not a single man of the whole number treated —about one hundred—was bled, generally or locally, and not one died of the disease. How strangely this practice, which

is now coming so much in vogue, contrasts with that of ten years ago, when the lancet was the first thing in the line of remedies that was thought of. The results could not have been better then than now. The treatment consisted mainly of very mild counter-irritation, with either dry cups, mustard, or iodine. The latter remedy proved to be very efficacious, especially in those cases where pleuritic pains were present. It was generally applied once a day. In two or three instances phthisis developed itself during convalescence, and in a short time terminated the patient's life. This tendency to the secondary development, so to speak, of phthisis, was also noticed in a marked degree in convalescent cases of rubeola. These patients, previous to the appearance of the eruptive disease, never had suffered from cough, from hæmoptysis, neither did they possess any hereditary right to phthisis.

The typhoid cases amounted to about one hundred and thirty. The disease as a whole was not of a very formidable character, two cases only proving fatal. Pneumonia, bronchitis, and also diarrhœa, were frequent complications. The first named complication existed in the two fatal cases referred to. Here, in the treatment of the disease, stimulants were used to their fullest extent of tolerance, and a suitable amount of nutritious diet was given at stated intervals. The stimulant which seemed to answer the purposes best was whiskey, in doses of eight or sixteen ounces per diem, made into a milk-punch.

Sometimes patients were admitted with a fever which resembled the first stages of the true typhoid, and seemed to have been caused by exhaustion and fatigue. This lasted but three or four days, rest and good diet being all that was required for its cure. It seemed to possess the character of that fever generally known as ephemeral.

The cases of pericarditis were, with one exception, caused by rheumatism. There was a remarkable collection of these cases, amounting to about forty. The principal complication was pneumonia. There was one remarkable case of pericarditis, where the friction sound lasted almost for thirty consecutive days, there being only three days during that time in which the sound could not be perfectly recognised. There was also made out a murmur with the first sound, heard at the apex (mitral regurgitative), and a murmur at the base with the first sound over the situation of the aortic valves (aortic direct murmur). The case was also of the greatest interest in connexion with a point of treatment. The patient took an almost fabulous amount of whiskey, and for a week at a time had about twenty ounces a day. We hope in future to give the exact amount of the stimulant taken, besides a more minute history of the case. There have been no fatal cases, and in not one instance has mercury been prescribed. The treatment for the rheumatism was alkaline, consisting of a drachm of Rochelle salts every two or three hours, according to the severity of the symptoms. Opium was also occasionally administered and stimulants always. Locally, counter-irritation in the form of blisters, mustard, and iodine, was employed. Wet cups were very rarely used, but dry cups were quite frequently resorted to.

Test for Brandy.—An interesting experiment was made last week at the residence of the sub-prefect of Saintes. A chemist from Cognac demonstrated that he could, by means of a reactive, distinguish pure Cognac brandy from mixed spirit, and tell whether the latter was composed of spirits of wine, beet-root, or corn spirit. Various descriptions of brandy were given to the chemist for his experiment. By pouring a glass of his reactive into a bottle of each liquor he produced instantly a particular tint, which indicated the nature of the mixture. There were a number of wine merchants and distillers present, who were astonished at the accuracy of the experiment, which succeeded above a hundred times.—*Lancet.*

Snow and Water.—According to the Meteorological Reports of Rev. Dr. Patterson twenty inches of snow are reckoned in Minnesota to make one of water.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, March 26, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

ERYSIPELAS OF HEAD AND FACE, WITH BRIGHT'S DISEASE, ETC.

Dr Draper presented a kidney, removed from a gentleman, æt. 65. Dr. D. was not able to give a complete history of the case, but could only refer to a few of the particulars. A year or two ago this gentleman had been seen by Dr. Clark, who discovered the existence of valvular disease of the heart, with hypertrophy. On the 18th instant he was seized with a chill, and on the day following the symptoms of erysipelatous inflammation about the face presented themselves. The disease, extending its limits, was accompanied with excessive prostration, and on Saturday the 22d, delirium set in and continued until his death on the Tuesday following, at 1 o'clock A.M. His urine was examined on several occasions previous to his death, and at no time was it found albuminous; no microscopical examination of the urine was made until the Monday preceding the attack of his last illness, when it was found to contain abundance of urates, with tubular casts of various sizes, and in various degrees of granular degeneration. The urine examined at this time was also found albuminous.

Autopsy.—The heart, kidneys, and a portion of the liver, were removed at the autopsy. The valves of the heart were more or less thickened; the pulmonary valves thickened at some points, and unusually thin at others. There were some atheromatous deposits in the aorta. The kidneys, much reduced in size, were found to contain microscopically an excessive amount of granular matter in the intertubular spaces; the tubuli from the cortical substance were filled with granular matter, and in none of them could any traces of healthy epithelium be found. The malpighian tufts were shrivelled, and their capsules thickened; and microscopic cysts were also visible. The pyramidal portion of the organ was in the same condition as the cortical portion. The liver was fatty, and the muscular fibres of the heart were extremely brittle, many of them presenting evidences of fatty degeneration.

The points of interest in the case were: the occurrence of erysipelas of the head and face in connexion with the disease of the kidney, and the absence of albumen in the urine previous to the last examination of that secretion.

Dr. Clark remarked that in April, 1859, he was asked to see this gentleman, and found him suffering from valvular disease, with moderate hypertrophy. He saw him also a year subsequently, and again two months before death, and at neither time was there any symptom present to excite the suspicion of Bright's disease. The examination, however, of the organ after death, showed pretty plainly that this disease of the kidney must have existed for a long time. The case, he thought, was one which illustrated the dependence of Bright's kidney upon cardiac disease as a cause, and also proved the fallacy of opinion in those writers who ascribe the existence of the contracted kidney to the abuse of alcoholic liquors—the patient being remarkably temperate.

A DERMATOPHYTE.

Dr. Lewis Smith presented a specimen of a dermatophyte. This specimen was taken from a boy æt. 6, in the practice of Dr. Campbell. This boy had very good general health, but was inclining to a scrofulous state. A few weeks since, the mother noticed a red point on the inner aspect of the thigh, and a few days after a smaller spot about half an inch distant from the first. These spots gradually increased, and coalescing, formed a patch about an inch long by three-quarters of an inch in breadth. There was no destruction of the cuticle, no moisture, and the patch was little if at all elevated above the surrounding surface. The disease re-

sembled ring-worm. Little attention was given to it till the mother noticed this parasitic growth, when the physician was called. The growth resembled in shape, color, and size, a split pea. It is found to consist entirely of elongated cells, many of them free, but others arranged linearly, the cohering walls not being destroyed.

CHOLESTEATOMATOUS TUMOR.

Dr. Smith also presented a cholesteatomatous tumor which was sent to the Society by Dr. Husted of 42d street. It was removed by him from the anterior tibial region of a female patient, æt. 25. It had been nine years growing, was movable under the skin, and had never caused much inconvenience. It was removed by a simple incision. It was about two and a half inches in length, two inches in breadth, and one inch in thickness. It had a dense fibrous capsule. The substance within the capsule had very much the appearance of spermaceti. It was very brittle, and near the capsule there was a tendency to a laminated arrangement, but this was imperfect. The central portion of the tumor was softer than the external, but it had a pure, white lustre.

Examined under a microscope, this substance was found to consist, 1st, of numerous crystals of cholesterine; 2d, of tufts of margarine; 3d, of oil globules, some free, and others collected in clusters; 4th, of a large cell, transparent, and perfectly free from granular matter. It caused no refraction of light, and could in general be seen only in its outline. On careful examination, especially after the addition of ether, faint round or oval nuclei could be discovered in some of the cells, but not in all. The shape of these cells varies considerably, but the typical form is egg-shaped or oval. There is more oily matter in the centre of the tumor than near the capsule.

The Society then adjourned.

Stated Meeting, April 9, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

DIPHTHERITIC FALSE MEMBRANE.

Dr. Clark exhibited some specimens of false membrane that were thrown off from the throat of a child who died that morning. One of the tubes apparently extended from the larynx only to the bifurcation of the bronchial tubes, while the other specimen seemed to be the continuation of the tube from that point downwards. Dr C. then gave the history:—One of these was raised after a struggle yesterday morning (Tuesday) at half past seven o'clock, the other without much effort at some time in the course of the afternoon. Considerable difficulty of breathing, rather paroxysmal than continuous, occurred during the time these membranes were in the throat, and at a later time when they were removed. The voice never cleared up in such a manner as to give us any hope that the disease had subsided, and in the course of the night the difficulty of breathing increased, and continued to do so, especially in paroxysms, until the following morning about seven or eight o'clock, when death took place. The question of tracheotomy was raised, but was objected to on the ground that the last portion of membrane discharged was broken off abruptly, leaving good reason to suppose that some still remained in the tubes lower down. It was very evident that the larynx was greatly obstructed, even after the removal of these two portions of membrane. The history of the case is not that which we usually see. Some time early last week, Dr. Timothy Cheesman observed upon the tonsils of this child some whitish dots, and hesitating for the moment whether it was membranous or the whitish material which usually forms in the follicles of the tonsils, he took no immediate steps with regard to it. Soon, however, observing that they were running together, he recognised the disease as diphtheria. There was not at any time swelling of the glands of the neck. This membrane ran together, and forming a coating upon the tonsils, exfoliated on Friday. On Saturday, I saw the child with him, and there was no membrane whatever upon the tonsils or any other portion of the fauces, except a mere fragment not much larger than a pin's head, that is to say in its superficial measurement, quite down to the end of the epiglottis. There was no membrane upon it, and no membrane in the neighborhood of it, still there was hoarseness, and there was a little of the tracheal breathing, and we apprehended that the membrane was forming in the air passages. It went on to form steadily from that time until the exfoliation and removal, and then it is evident it was renewed after that, and the second membrane was the chief agent in destroying the child's life. The point that I wish to refer to as interesting is the complete exfoliation from the tonsils, and the subsidence of the inflammatory action in the tonsils before there was any marked evidence of membranous disease of the throat, leaving reason for a little time to hope that the disease had subsided, and would not enter the air passages. The character of the membrane microscopically is this:—Almost entirely a fine fibrillation, with the exception of a layer of pus that seems to have formed on its under surface. The disease seems to have been of a character to produce at first membrane, afterwards purulent effusion, and then again membrane.

POLYPUS FROM MEATUS AUDITORIUS.

Dr. Post exhibited a polypus taken from the meatus auditorius of the ear of a man, thirty or forty years of age, which was remarkable for its size and firmness. The disease existed from early childhood, and the portion shown, about the size of a hazel nut, did not constitute the whole of the growth. It was removed by the scissors, and the patient was requested to call again, in order to have the operation completed. The precise point of attachment could not be ascertained.

OVARIAN CYST SUCCESSFULLY REMOVED.

Dr. J. L. Campbell by invitation presented an ovarian cyst removed from a lady in this city on the 3d of the previous month (April), by Dr. Washington L. Atlee of Philadelphia.

Mrs.——, aged 50, has enjoyed uniformly good health. Was married at 24, and is the mother of five children, the youngest being 13 years of age Nothing worthy of remark occurred during any of her first periods of gestation, parturition, or lactation. Enlargement of lower portion of abdomen was first observed soon after the birth of her last child in March, 1849. The enlargement was symmetrical, and increased with almost uninterrupted uniformity up to a period of six months since, when the growth became more rapid. It was now exceedingly large and cumbrous. Patient still menstruates. The operation was made in the presence of a number of medical men in this city, and several from other parts of the state. The temperature of the room was kept about 80°. After inducing anæsthesia, an incision about two inches long was made in the line of the linea alba midway from the umbilicus to the pubes through all the tissues until the cyst presented, into which a large trocar was thrust, giving exit to *fifty-two pints of fluid*. The fluid was less viscid than the ordinary contents of ovarian cysts, and abounded in cholesterin; the tubular crystals of which glistened in the light, and as subsequently examined under the microscope appeared very beautiful. As the fluid escaped the abdominal walls collapsed, and were supported by the hands of the assistants.

By a dextrous use of the canula, a small portion of the sac was turned out of the abdominal opening. This was seized, and (there being no adhesions) the entire cyst was readily withdrawn after a slight prolongation of the incision. The peduncle was long, and about an inch and a half in thickness. It was secured by a silver clamp tightly screwed upon it. The sac was cut off about half an inch beyond the clamp, and the stump smeared with a solution of the persulphate of iron. Wire sutures were then passed through the tissues including the peritoneum, and the incision closed, leaving the stump projecting at its inferior extremity. Adhesive straps were then applied, and warm water dress-

ings, and the whole secured by flannel bandage. At no time during the operation was there any marked depression of the vital power. The cyst, it will be seen, is unilocular, arising from the left ovary. Several small cysts are seen in the region of the ovary. It varies in thickness from one to twelve lines, and is of a tough fibrous texture, capable of containing, as was stated, fifty-two pints of fluid. It weighs about two and a half pounds.

Vomiting occurred at irregular intervals for forty-eight hours after the operation, and it was necessary to use the catheter for three or four days. Opium *pro re nata* to induce rest and freedom from pain. The pulse never rose above 108. The clamp separated on the seventh day. The incision healed by first intention. The stump still requires dressing.*

Dr. Holcomb asked concerning the size of the trocar used. He had seen Dr. Sims in an operation for ovariotomy use one as large as a small vaginal speculum. In that case the clamp was tried, but its application was attended with so much difficulty that it was abandoned, and silver suture substituted. A second operation had since been rendered necessary.

Dr. Otis stated that he was present at the second operation, but the adhesions of the sac were so extensive that the fluid was merely evacuated and the wound closed.

EPILEPSY FROM COMPOUND FRACTURE OF SKULL.

Dr. Finnell exhibited a specimen, consisting of a portion of brain substance removed from a farmer aged 30 years, whose death was caused by epileptic convulsions. About five years ago he was thrown from his wagon, sustaining a compound fracture of the right parietal bone near the temporo-parietal suture. He was able to get up after the fall, and walk a distance of ten or twelve yards, when he became too faint to proceed further. A portion of brain substance was found upon the vehicle. An examination of the wound at the time disclosed fragments of depressed bone, and one of these, about half an inch in length, penetrated into the brain substance. All the loose portions were removed. The man made a good recovery, but about a year after the accident he was seized with an attack of epilepsy, followed at irregular and frequent intervals for a period of five years by other similar seizures. A portion of skull at the seat of the injury being depressed, he came to the city with a view of having that depression removed by an operation, and a possible cure of the epilepsy. Dr. Mott operated by trephining the patient, and removing a portion of bone. The patient refused to take chloroform, but when the bone was being sawn through he expressed himself free from any suffering of pain. When the scalp was touched, however, the pain was quite distressing. The operation was not completed many hours before convulsions came on, and continued until death took place. On post mortem examination, at the seat of the operation the membranes had become adherent. The depression in the brain substance was equal to about an inch, but there did not seem to have been any other noticeable change in the part. In a case reported to the Dublin Pathological Society, where a person died thirteen years after a similar injury, and was also subject to repeated attacks of epilepsy, the membranes at the seat of injury were found much thickened, and at one or two points calcification existed.

The Society then adjourned.

To make Cod-Liver Oil Palatable and Easily Assimilated.—Dr. Alexander Wallace, of Dublin, after a series of experiments with reference to obtaining cod-liver-oil in the state of minute subdivision for purposes of easy assimilation and palatability, recommends that it be mixed either with wine of iron and glycerine, or with the aqua calcis. The syrup of the iodide of iron can also be used with advantage instead of the wine of iron.

* The stump has retracted and cicatrised (May 8th), and the patient is well. Dr. Atlee informs me that it was his seventy-third operation for this disease.

Progress of Medical Science.

PREPARED BY E. H. JANES, M.D.

FOREIGN BODIES IN THE TRACHEA.

Two cases are reported in the *British Medical Journal* of April 26th. The first, by Dr. John Armstrong of Gravesend, was a boy aged ten, having a bean in his mouth, set off to run with another boy, when the bean slipped down, and he appeared for a time as if he would be strangled. The symptoms subsided; and he ate, drank, and even sang, so that nothing was done. On the next day he was seized with difficulty of breathing, became greatly distressed, eyes prominent, countenance livid, pulse feeble and slow, and surface cold. While in this condition, laryngotomy was performed, which excited a violent fit of coughing, though the body was not expelled; the distressing symptoms, however, were greatly relieved. The evidence, however, of the presence of a foreign body was unmistakable, and, finally, with the assistance of Mr. T. B. Curling, the bean was removed piecemeal, partly with the ingenious forceps obtained from Messrs. Weiss, and partly by the coughing of the patient. The boy was then put to bed, tepid water dressing used, and diaphoretic mixture. The wound healed, the voice returned, and the boy recovered without any bad symptom.

The second case, reported by Dr. S. Monckton, of Maidstone, was that of a boy aged seven, who, on returning from school, swallowed—as he said—a nutshell, of which he soon after informed his mother. It caused no uneasiness, except a choking fit in the evening, till next morning, when he was seized with alarming symptoms of cough and suffocation and hurried off to the infirmary, having the appearance of a child in the last stage of croup, from which he rallied after two hours of rest, his breathing becoming quite natural. As no one had seen him swallow the nutshell there were some doubts as to whether the spasms might not have been of extrabronchial origin,and therefore tracheotomy was not performed. He remained in the hospital six weeks, suffering during the first three from a moderate attack of bronchitis. The boy gradually improved, until twenty-three weeks after the accident, when one evening he suddenly expectorated the nutshell without difficulty. It had the appearance of half the entire shell of a long filbert, little changed except a slight rounding off of the broken edges.

TRAUMATIC TETANUS.

The *Lancet* publishes a case of traumatic tetanus successfully treated with opium and belladonna poultices, by Dr. S. Cartwright Reed. The patient was a lad of healthy appearance, aged 17, who was knocked down by a cart, a wheel grazing the side of his head, nearly tearing away the right ear, and fracturing the right maxilla at its symphysis. Notwithstanding a careful dressing of the wound gangrene supervened in twenty-four hours, which made it necessary to remove the ear, when a linseed poultice was applied and saline aperient administered. The wound progressed unfavorably, and on the third day tetanic symptoms began to show themselves. An aperient draught was ordered immediately, and linseed poultice with a drachm of opium powder applied to the wound. The next day belladonna mixed with glycerine was substituted for the poultice, and one grain of opium with two of calomel given at night. Slight improvement was soon apparent and the treatment continued, substituting mercurial ointment for the glycerine, and after the sixth day the tetanic spasm gradually disappeared and the boy rapidly recovered.

BLOODLESS REMOVAL OF PORTIONS OF THE TONGUE.

Dr. Alexander Simpson, of Edinburgh, succeeded in removing an epithelial ulcer of the tongue, situated near the root of that organ, where it would be difficult to apply the écraseur, by first passing a loop of platina-wire through the tongue towards its root, and below the epithelioma. A

stream of galvanism was then passed through the wire so as to render it red hot, and in this way a flap of considerable size was cut off the side of the tongue. The loop of wire was then applied round the base of this flap; but on attempting to tighten it the wire gave way, and its removal was effected by means of the écraseur. A hard nodule left in the side of the tongue was seized with a vulsellum, and surrounded with a loop of the galvano-caustic wire. The teeth of the instrument tore a little artery which began to spout. The wire through which the current was passing lighted up the cavity, showing the bleeding point, to which it was easily applied and the hæmorrhage arrested. Dr. S. has used the galvano-caustic wire in the removal of hæmorrhoids, etc. Its advantage over the écraseur is that it can be applied in situations where the latter is impracticable. The specimen was exhibited at the Medico-Chirurgical Society, and published in the *Edinburgh Medical Journal*.

NEW INSTRUMENT FOR VESICO-VAGINAL FISTULA.

Prolapse of the anterior wall of the bladder through the rent in the vaginal wall, greatly embarrassing the surgeon, is easily prevented by a little instrument invented by Dr. Henly Thorpe of Letterkenny, and presented to the Surgical Society of Ireland. It consists of a flat piece of wood of an elongated elliptical form, the short diameter corresponding to the diameter of the fistula, with a cord passed through near one end and fastened by a common knot. The plug is to be pushed into the bladder through the fistula, and so placed that the extremity through which the cord is passed shall be towards the urethra, and the longer end of the plug shall cover the fistula and lie upon the floor of the bladder beyond it. When traction is made by means of the cord downwards and forwards, the plug cannot escape through the fistula, but drags the floor of the bladder downwards towards the external parts, bringing the edges of the fistula into view, and into a favorable position for operating, all prolapse of the anterior wall of the bladder being rendered absolutely impossible. When the vivification of the edges is completed the plug is removed as easily as it has been inserted. Of course, the size of the plug must vary according to that of the fistula.

CAUSES OF FAILURE IN THE TREATMENT OF UTERINE ULCER.

The advantages of a careful diagnosis as conducive to successful treatment of the different forms of uterine ulcer are clearly set forth in a series of articles published in the *Lancet*, vol. ii., 1861, by Robert Ellis, Esq., Obstetric Surgeon, etc. The principal causes of failure in treatment are found to be, 1. Errors of diagnosis; 2. Errors of treatment; 3. Inefficiency of the means employed; 4. Neglect of accessory means; and 5. Imperfect cure of the ulcer. Malignant ulcer—true cancer of the cervix—has been mistaken for the simple sore, and treated with escharotics. The simple ulcer has also been mistaken for cancer. The indolent, diphtheritic, and fungous, has each in its turn been mistaken for the inflamed ulcer, and the patient submitted to repeated leechings and other antiphlogistic measures. Errors in treatment could not well be avoided from the want of previous experience, and the proper construction and use of the requisite instruments. The latter deficiency now no longer exists, and the different forms of uterine disease are now better understood, and true principles of cure are laid down. Yet the application of leeches to an indolent ulcer, on the one hand, and the administration of wine, quinine, etc., for the treatment of the inflamed ulcer, on the other hand, are errors of frequent occurrence. The selection of an escharotic inappropriate to the case under treatment, or a reliance on injections for the cure of any form of uterine ulcer, may each be set down as a frequent source of failure to cure. A fungous ulcer on an atheromatous basis, occupying both lips of the cervix uteri and reaching high up the canal, after being under treatment for three years, and cauterized with nitrate of silver upwards of one hundred times without deriving much benefit, soon yielded to a few resolute applications of the stronger caustics, followed by a thorough penetration of the canal by the lunar caustic. So also will the weaker caustics be found inadequate to the cure of the inflamed, hypertrophied pus-secreting ulcer, which requires measures of sufficient penetration to substitute healthy for diseased action in the shortest time. For the melting down of a strong hypertrophy, the potassa fusa is applicable; the acid nitrate of mercury in certain states of the inflamed ulcer; the strong nitric acid saturated with nitrate of silver being both a powerful escharotic and astringent, is fit for the treatment of fungous ulcer. The nitrate of silver alone cannot be substituted for either of these more powerful caustics, though it is useful for milder cases, if firmly applied and allowed to lie for some seconds on the part affected. Inefficient use even of the most appropriate remedies may be a frequent cause of failure; the ropy discharge, if not carefully removed, will go far to neutralize their effects. Also neglect of applying the escharotic sufficiently high up in the canal is another cause of failure. To obviate the danger of fracture in using the stick of nitrate of silver, the author makes use of an instrument in which he has passed a platinum pin through a hollow cylinder of the caustic, rendering it impossible to be broken off. This can be passed, if desirable, even through the os internum. Though injections cannot be substituted for any of the above named remedies, yet as accessory means they constitute an important part of the treatment. The ordinary female syringe is, however, entirely too small to be of much service. In place of this an instrument known as the uterine douche is highly recommended. A due attention to the laws of hygiene should be also strictly enforced. It should also be the duty of the practitioner to see that the cure is thorough before discharging his patient, otherwise the relief derived is but temporary, and after the lapse of a year, or perhaps less, the whole malady has to be treated over again.

The following table presents a brief *resumé* of the subject:

VARIETY.	CHARACTERS.	TREATMENT.
1. Indolent ulcer.	Cervix hypertrophied, of a pale pink, and hard. Os patulous to a small extent. Ulcer of a rose red. Granulations large, flat, insensitive, and edge of the ulcer sharply defined. Discharge: mucus, with a little pus, and occasionally a drop of blood.	For a few times the caustic pencil. Afterwards several applications of solution of nitrate of silver in strongest nitric acid.
2. Inflamed ulcer.	Cervix tender, hard, a little hypertrophied, hot and red. Vagina hot and tender. Ulcer of a vivid red. Granulations small and bleeding. A livid red border round the ulcer. Discharge: a muco-pus, yellow and viscid, with frequently a drop of bright blood entangled in it.	Occasional leeching; hip-baths (warm); emollient injections. Then acid nitrate of mercury several times, succeeded by the solid lunar caustic potassa fusa or cum calce.
3. Fungous ulcer.	Cervix soft, large, spongy to the touch. Os wide open, so as to admit the finger. Ulcer large, pale, studded with large and friable granulations. Discharge: a glairy, brownish mucus, frequently deeply tinged with blood.	At first caustic pencil. Subsequently nit. acid solution of nitrate of silver, or acid nitrate of mercury; electric or actual cautery.
4. Senile ulcer.	Cervix small, red, a little hard. Ulcer small, extremely sensitive, of a bright red color. Granulations very small, red, and irritable. Discharge: a thin muco-pus.	Potassa fusa, or strong nitric acid with nitrate of silver, once or twice at long intervals. Then solid sulphate of copper in pencil.
5. Diphtheritic ulcer.	Cervix of ordinary size; a little hot, dry, and tender. Ulcer covered in patches with a white membrane adhering closely; irritable, and readily bleeding beneath. Discharge: a thin, acrid mucus, without pus, but occasionally tinged with blood.	At first, electric cautery, potassa cum calce, or acid nitrate of mercury, two or three times at long intervals. *No nitrate of silver.* Subsequently, stimulant applications, tincture of iodine, or sulphate of copper.

Dr. R. H. Gilbert, Brigade-Surgeon, has been appointed Medical Purveyor at Fortress Monroe, in place of Dr. Sheldon, who has been transferred to the charge of the Military Hospitals at Norfolk.

American Medical Times.

SATURDAY, MAY 31, 1862.

THE CLAIMS OF THE SANITARY COMMISSION.

The Sanitary Commission has now been in existence about one year, and the manner in which it has adapted itself to the wants of our soldiers cannot but be appreciated by those who have kept track of its doings. Its labors commenced in anticipating the wants of the army that was to be placed upon the field, which it did on a scale fully in accordance with the magnitude of the result to be obtained. Since that time no efforts have been spared on the part of the commission to fulfil the grand and benevolent design for which it sprang into existence. That it is eminently fitted for the work that it has undertaken can be seen when we consider its peculiar organization; a truly expansible body, its power is, so to speak, unlimited. Reaching out as it does by means of the several inspectors over the whole extent of our battle-ground, and holding direct communication from distant points with our large cities, it naturally and quickly adapts itself to every exigency. We have had numerous illustrations of its promptitude on such occasions: Twenty-four hours before the affair at Fort Donelson, hundreds of boxes of hospital stores were sent with proper executive officers and agents, whose duty it was to see that everything should be properly distributed. The great confidence which has been placed in this body by the military authorities has enabled it thus to be prepared, and on the alert, to offer every aid which humanity and benevolence can suggest. The same confidential relations with these authorities have enabled it to follow the grand army of the Potomac, and minister to its many necessities; and when the order for an onward march was given the commission was selected to care for the sick and wounded that were to be left behind. This was gladly done, and within an exceedingly short space of time six thousand of our suffering soldiers have been removed from the unhealthy climate of the South to the salubrious air of our northern cities.

Although ostensibly an advisory body it is practically a benevolent organization, and is constantly giving at the rate of many thousands of articles daily. We are informed that from the central depot at Washington alone it has sent out to the number of 65,000 articles, embracing every necessity for the sick, from casks of wine to shirts and napkins. If we also consider that a proportionate amount of freight is sent by the other branches, we can easily conceive the number of the articles to be almost incalculable. With the progress of the war the demands upon the resources of this body are constantly augmenting, and though the medical bureau is in hearty sympathy with the work, and will doubtless do all in its power to cooperate with it, and has absolved it from all the various responsibilities that it hitherto has assumed in matters of camp inspection, etc., which is now provided for by the law reorganizing the medical department, it has still need for material aid. Its functions should and will be continued to the end of the war. As an exponent of the wishes of every one interested in the welfare of our army it has a strong claim on the benevolence of the community. No one can appropriate his money to better advantage than by placing it in the hands of the authorized agents of this body. They, by a thoroughly systematic management, take care that everything reaches its place of destination, while on the other hand it is well known that the storehouse at Washington is filled with packages which, being sent by private enterprise, from misdirection or mismanaged, have missed their way.

More could not be asked than has been accomplished in the judicious distribution of every necessary for those who are really needy. These acts of beneficence, however, must not be cramped by any lack of donations, or any want of a cordial coöperation on the part of the community, in this their hour of need. No class of men can do more with particular communities in influencing their charitable motives than can the physician: thoroughly acquainted with the wants of the sick and wounded, he knows best how to touch the sympathies of the people, and direct them in their proper channel. He can do much to educate all with whom he is brought in contact into the necessity of lending their aid to so grand and comprehensive a charity. Some of those outside of our profession are keenly alive to the claims which the commission has upon them for help. The letter of Colonel Howland, of General McClellan's staff, in sending a donation of one thousand dollars, modestly but eloquently utters the sentiments which fill the souls of at least our volunteer officers. He says:—

"I have seen too many instances of the great good the Sanitary Commission is doing not to be grateful for its work, and at the same time anxious to help it in the only way I know how."

If the doings of the Sanitary Commission were fairly and truthfully set before the public, there would be very many who would be ready and willing to follow the noble example of the colonel.

NEW APPOINTMENTS AT THE "FACULTY OF MEDICINE," OF PARIS.

The *Gazette des Hôpitaux*, for April 24th, announces two new appointments at the Faculty of Medicine: M. Rayer, to the Professorship of Comparative Medicine, and M. Robin, to the Professorship of Histology. The chairs to which these eminent *savans* are appointed are of new creation, and their necessity has been developed by the extensive labors, especially of M. Robin, in the special departments which are thus added to the curriculum of instruction. M. Rayer, already well known to the profession of all countries by his extensive researches in practical medicine, has for many years been engaged in the study of the morbid conditions, artificially produced, as well as naturally developed, in the lower animals, as compared with the human subject. M. Robin, the author of numerous works bearing on Histology, in its most external application, is not less known in the scientific world. It is not without interest and instruction, that we of the profession watch the progress of scientific improvement in the great centre of medicine. One would think that it could be not without influence upon the condition of medical science in our own country, that this progress is brought to the knowledge of those who should cherish and reveal scientific labors. It should stimulate our profession to jealously guard the position and privileges we enjoy as the result of unaided efforts;

for, as we never have received we fear we may never expect to receive, the encouragement and assistance which has made Paris the scientific centre of the world. As the medical profession maintains its dignity, not by any recognition by our government, but by its own exertions, we could not hope, without a change which is not likely to occur, to have any substantial official recognition of scientific labors. An irregular would be more likely to succeed in obtaining a chair in a Governmental Faculty, if we had an analogue to the French Faculty of Medicine with a sufficient pecuniary endowment, than to enter our Army Medical corps, to get a position in our hospitals which have been built up by the gratuitous labors of our profession. This want of legal protection to our profession is an effectual bar to the encouragement and rewards for scientific labors which are held out by other countries. The few extracts we venture to make from the report of the Minister of Public Instruction, etc., to the Emperor, shows the deep interest taken by the French Government in scientific improvement.

"Sire—Your Majesty watches with constant solicitude the progress of the institutions for public instruction. Among these institutions there is none which renders greater service, and which has acquired more legitimate renown, than the Faculty of Medicine of Paris. The force, the solidity, the extent of its teaching, corresponds to the eminence of the professors who have rendered its chairs illustrious, and who now occupy them with so much distinction. It receives in its midst a crowd of studious pupils, whom it sends forth, proud of the title which they have attained, rich in excellent instruction, and competent to fulfil in society the duties of their useful and noble profession. But, besides this, its reputation has extended beyond the boundaries of France, attracted from all quarters of the globe an annual concourse of students, who, already instructed in the universities of their country, come to complete their medical education in the active centre of labor and of science. The Faculty of Medicine of Paris owes this influence and this success to the efforts which it has employed at every epoch to place itself at the level of all scientific acquisitions. It will continue to progress in this path so fruitful, and the government of your Majesty will neglect nothing, that medical instruction may enlarge by reason of the new developments of science.

"Comparative medicine is one of the developments of modern science." * * *

The reporter then goes on to mention the necessity of the chairs of Comparative Medicine and Histology, and the claims of MM. Rayer and Robin, whom he recommends to be appointed.

"The creations which I solicit of your Majesty answer the real necessities of instruction and the actual state of science, and in realizing them the Emperor will manifest anew to the country the lively and powerful interest which he accords to the progress of public instruction." * * *

In addition to the appointment to the chair of Comparative Medicine, M. Rayer is made Dean of the Faculty in place of Baron Paul Dubois, who retires and is made honorary Dean. The editor of the "*Gazette*" expresses surprise that one with such numerous occupations as M. Rayer, and "arrived at an age when the necessity of repose has already made itself felt," should undertake these additional duties.

Charles Robin, the new Professor of Histology, is one of the most remarkable men of the age. His name is already familiar to us on this side of the Atlantic, but few know the extent of his scientific labors. For twenty years he has been engaged in the study of histology, and since 1847 has produced besides numerous works, reported to scientific bodies, and published in periodicals a number of systematic treatises which are all regarded as authority on their various subjects. He has not yet, however, finished the crowning work of his life, which will soon appear, and will embrace the origin, development, natural decay, and morbid alterations of all the tissues of the body. To follow the various tissues from their first appearance to their perfect development, then to their final decay, and likewise through the morbid changes to which they are liable, is the stupendous labor which he entered upon twenty years ago, the result of which the world will soon see. None but those who have followed his private instruction are as yet in possession of his histological views, but to them the revelation has been like a new world, and Robin is the Bichat of our generation. Robin has not worked and does not work for any but his *confrères* in science; and the minuteness of detail, which is laborious for an ordinary student, teaches them how the great truths have been developed, and marks an example which the humblest worker may follow and contribute his store to the magnificent edifice of Science. It will be long before the "General and Pathological Anatomy" will be appreciated by the profession, and not before it has been well diluted by compilers; but its appearance will mark an era in medicine.

The larger works of Robin are the *Chimie Anatomique*, which he wrote in connexion with Verdil; the *Histoire Naturelle des Végétaux Parasites;* the *Microscope et Injections*, and Nysteres' Dictionary, edited by Littré and Robin, containing in Anatomy and Pathology many of Robin's views. His smaller monographs are very numerous, and of late years many have appeared in Séquard's Journal of Physiology.

After twenty years of scientific labor, Robin is not only Professor, but he has created the necessity for the establishment of the Chair which he only can fill.

THE WEEK.

Some time since, it may be recollected, we called attention to an error in the last English edition of "Samuel Cooper's Dictionary of Surgery."

In the British Medical Journal of April 12th, Mr. J. E. Erichsen, the distinguished surgeon of London, published the following satisfactory explanation.

"*The First Ligature of the Internal Iliac Artery in the United States.*—Sir: In the last number of the *Journal*, under the heading of 'A Slight Error,' it is stated that I have, in the last edition of *Cooper's Surgical Dictionary*, attributed to 'Mr. Hudson of New York' instead of to 'Dr. S. P. White, formerly of Hudson, in the State of New York,' the merit of having first tied the internal iliac artery in the United States of America. The error is not mine but Mr. Cooper's. It occurs in the edition of 1838, from which the new issue of the *Dictionary* has been compiled, etc.

"I am, etc.,

"John E. Erichsen."

"6 Cavendish Place, *April* 8, 1862."

We avail ourselves of this opportunity to correct a few other errors in relation to this important and difficult operation. Mons. Velpeau, the celebrated surgeon of Paris, in his valuable and elaborate work on surgery, attributes the operation in one place to Samuel White, and in another to M. P. White. Dr. Mott, in his notes, gives it correctly to Dr. S. P. White. Lecturers in our Medical Colleges, when alluding to the subject, have often spoken of it as the liga-

ture to the common iliac artery instead of the internal iliac artery. It is very curious that the error should have lain uncorrected for twenty-four years in Cooper's Surgical Dictionary, and it can only be accounted for on the ground that the American edition is principally used in the United States. It is strange, also, that the London edition should denominate it a "slight error." It ought not certainly to be considered in that light by the gentleman who really performed the operation.

—

Another charitable institution, the North Eastern Dispensary, situated at the corner of Lexington Ave. and 51st st., has lately been organized. The want of a Medical Charity in this portion of the city has long been felt, and now that it is in successful operation we have no doubt that the number of patients who will apply for advice will be very large.

—

We are informed that during the month of June, the library of the late Dr. John W. Francis will be sold at auction by Bangs, Merwin & Co., 594 Broadway. The catalogue is very extensive, presenting a large collection of medical books and journals, and works on early American history.

CASES OF VAGINISMUS, WITH THE METHOD OF TREATMENT.

By J. Marion Sims, M.D.

[Reprinted from the Bulletin of the N. Y. Academy of Medicine.]

In May, 1857, I was called to see a lady, forty-five years of age, who, married at twenty, had been an invalid ever since. Menstruation, always painful, had just ceased. She had great irritability of the bladder, a sense of bearing down, and other symptoms of uterine derangement. But the most remarkable thing in her history was the fact that she had remained a virgin, notwithstanding a married state of a quarter of a century. Some two or three years after marriage, her physician discovered a sanguineous tubercle at the meatus urinarius, and removed it with the expectation of relieving her peculiar condition, but no benefit ensued. He then attempted to dilate the vagina with graduated bougies, which produced the most intolerable suffering without the slightest permanent improvement. She next consulted the most eminent physicians in the principal capitals of America, and visited London, Paris, and other European centres of learning, asking advice of leading surgeons, but no one could give a satisfactory solution of the case, or advised anything more than the bougie system, which had been already fruitlessly exhausted. Possessed of ample means, she and her husband had left nothing untried that promised the least hope of success. And thus many, many long years had passed when I was sent for, not to be consulted in respect to this peculiarity, which they had long since learned to look upon as incurable, but for the state of her general health.

I found her nervous system in a deplorable condition. It was exceedingly impressible, the slightest noise causing her intense pain. She was only able to walk across the room, but did not often venture even upon this, being confined for the most of the time to her couch, where she gave herself up to unceasing intellectual effort. Her mental tension and sedentary habits were supposed to be the cause of her great nervousness.

Amongst other means of diagnosis, I proposed a vaginal examination, which she assured me was impossible, then gave me the history already related. I attempted it, however, but failed completely. The slightest touch at the mouth of the vagina produced the most intense agony, throwing her nervous system into great agitation, with general muscular spasm and shivering of the whole frame as if with the rigors of an intermittent, while she shrieked aloud, her eyes glaring wildly and tears rolling down her cheeks, all rendering her a pitiable object of terror and suffering. Notwithstanding all these outward involuntary evidences of physical commotion, she had moral fortitude enough to hold herself on the couch, imploring me meanwhile not to desist from my efforts while the least hope remained of finding out anything about her inexplicable condition. After pressing with all my strength for some minutes, I succeeded in introducing the index finger into the vagina up to the second joint, but no further. The resistance to the passage was so great and the vaginal contraction so firm as to deaden the sensation of the finger, and thus the examination revealed only an insuperable spasm of the sphincter vaginæ. Whether the vagina was defectively developed or normal, I could not determine. I candidly told her husband that I knew nothing whatever about the case, that I had never seen or heard of anything like it, and that it would be quite presumptuous in me to hazard an opinion, or to hope to do anything for her, when they had consulted the ablest surgeons in the world without receiving the least information on the subject, and that I could promise nothing. However, I suggested the propriety of her going to New York for further investigation under anæsthesia. She accordingly did so, and I invited the late Dr. John W. Francis, Dr. Emmet of the Woman's Hospital, Professor Van Buren, and Dr. R. S. Kissam, to see her. The two last named gentlemen assumed the responsibility of the etherization, which was to me a matter of some anxiety, owing to her peculiar nervous organism. Previously to the anæsthesia, I attempted to make a vaginal examination, when the same train of symptoms was manifested as on the former occasion. But as soon as she was fully under the influence of the ether, greatly to my surprise, I found the mouth of the vagina completely relaxed and the vagina itself perfectly normal, not presenting the least deviation from health. It was not large, but certainly quite as well developed as it ought to be at her time of life, and under the circumstances. The uterus was retroverted, and there was a small polypoid excrescence about as large as a pea hanging from the os tincæ. This was removed, not with the expectation that it would have any influence upon her condition, but to prevent the risk of future growth.

The opinion that I gave on the case was this; that it was a spasmodic contraction of the sphincter vaginæ, resulting from an irritable condition of the nerves of the part, which I could not explain. To the question whether it were possible to effect a cure, I replied that I did not know, for the books threw no light on the subject; but that the only rational treatment appeared to me to be surgical, *i. e.* dividing the muscles and nerves of the vulval opening. They seized on the idea, and insisted on the operation, which I declined to perform, on the ground that an untried process was not justifiable on one in her position in social life, the Hospital being the legitimate field for experimental observation.

I have related this case somewhat at length, to make it descriptive of the class which it represents, and I shall be glad if this learned body will allow me, in my own simple way, to continue the story of my own experience in the matter. I have nothing to say on the literature of the subject; I leave that to others.

The high intellectual endowments of this lady, her elegant culture and fine social position, as well as her long suffering, all conspired to make her case one of much thought and anxiety to me, and I could not easily dismiss it from my mind. I consulted authors, and found cases described by them of pruritis, hyperæsthesia, neuralgia, neurosis, artresia, etc. etc., all of which I had seen, but nowhere did I find any description of disease answering to the peculiarities of this case, which I naturally concluded to be unique and anomalous. But about fifteen months afterwards, Professor Pitcher of Detroit, Michigan, sent me another case, precisely similar, except that the lady had been married for two

years. She had the same instinctive dread of being touched, the same muscular contraction of the whole frame, etc., while it was utterly impossible to pass the finger into the vagina. As this lady's husband threatened to obtain a divorce, I looked upon her case as justifying the experiment. So, fully explaining to her our ignorance on the subject, I proposed a series of experimental incisions, etc. etc., to which she readily consented. Thinking the division of the irritable spasmodic outlet to be the only rational operative procedure, I at first divided only the edges of the hymeneal membrane on each side of the fourchette. No relief ensued. After waiting for the wounds to heal, I divided the parts again at the same points, extending the incisions deeply, however, through the mucous membrane, and through some of the fibres of the sphincter muscle. This was followed by some improvement; she could bear the introduction of one finger without great pain, and could even tolerate two, but with considerable suffering. I now saw that the hymen itself was the focus of the excessive sensibility, and proposed to cut it out entirely, and afterwards to repeat the lateral incisions as before, making them deeper, and rendering the dilation permanent by the use of a properly constructed vaginal dilator. By this time the mother of the lady had come to the very just conclusion that I was *experimenting* on her daughter. I told her that it was true, and attempted to explain to her the propriety of such a course when a lawsuit and divorce were in prospective. The mother, however, was inexorable, and unfortunately removed her daughter from my care. Nevertheless, her improvement was so great that I have no doubt of her fulfilling the relation of wife under some difficulties.

The experience gained by this case was of great value to me. A few weeks afterwards, singularly enough, another case fell into my hands—the wife of a clergyman, who had been married for six years. Sexual intercourse was impossible. Several surgeons had been consulted, without receiving any explanation of the case, and of course, without relief. On examination, I discovered a sanguineous, mucous, irritable tumor at the mouth of the meatus urinarius, and notwithstanding the experiments already related, persuaded myself that this tubercle was the cause of all the trouble. The tumor was removed and its seat cauterized. In due time, she returned home, but came back in a few days to report a persistent state of virginity. On a more minute examination, I found the case to be in all particulars precisely like those previously related, but not quite so intense in its manifestations. The slightest touch at the reduplication of the hymeneal membrane with a feather or a camel's hair pencil, produced as severe suffering as if she were cut with a knife.

While this lady was under treatment (April, 1859), a fourth case came under my observation. The lady had been married three years. Sexual intercourse had been imperfectly accomplished a few times during the first few weeks after marriage. She innocently supposed that all women had to suffer as she did, and tried to bear it like a good Christian, but her sufferings were so intense that she at last looked with the greatest terror on the approaches of her husband, to whom she was devotedly attached. At her earnest entreaties, her husband, who was equally devoted to his wife, ceased all efforts at sexual intercourse, and they lived and loved as innocently as two little children. But at length the mother of the poor timid girl began to wonder why after three years of marriage her daughter, who seemed to be healthy, and who had a healthy, vigorous, young husband, had not become pregnant, and ventured to speak of her disappointment in not being advanced to the honorable title of grandmother. Upon this, the daughter hesitatingly explained the whole to the mother, who immediately brought her to me. I found precisely the same condition of things as already described.

Three weeks after this, my friend, Dr. Harris, of E. 30th st., New York, brought me another (the fifth) case. The patient had been married two and a half years, and, in consequence of her persistent virginity, her husband was truly unhappy. I had now (June, 1859) three cases under observation at the same time. To cut short this long narrative, I will simply say that after many experiments and disappointments, all were perfectly cured in August, 1859.

(To be Continued.)

Correspondence.

HEALTH OF THE ARMY OF THE MISSISSIPPI.

[To the Editor of the American Medical Times.]

Sir:—Since I last wrote, our course has been winding and devious, long fatiguing marches, heavy night and guard duty, and working in the trenches and swamps about New Madrid and Island No. 10, and, finally, the whole command of Gen. Pope densely packed upon steamboats, went down to Fort Pillow to invest that place. After two days' labor we were mostly ordered back up the river to Hamburgh, to aid Gen. Halleck in his attack upon Corinth. We were about six weeks in and about New Madrid, and before we left the men began to suffer with severe diarrhœa assuming a typhoid character, presenting many of the graver symptoms which were so fatal in Upper Missouri during the winter. But fortunately for the army we soon marched, and but few cases in the command proved fatal.

Of the primary amputations performed there after the battle I know several died before I left, and others were not progressing as well as could be hoped, though I do not think it was for lack of attention, as everything was provided for their comfort that could be had. I regard the fatality as caused by the serious character of the wounds, most of the injuries being produced by round shot and shell, producing such depression of the powers of life that reaction does not seem to fully re-establish itself. Such was the fact in the case of a Lieutenant-Colonel of the 47th Illinois, who had a leg torn off by a round shot at this place on Friday last. He was a stout, healthy, vigorous man; the leg was carried away below the knee, but he never rallied from the shock, though every means was used to save him. In our shipment from New Madrid, Missouri, up and down the river, we were greatly crowded and kept on steamboats nine or ten days. The consequence was that meals were irregular, sleep broken, and the whole command were heartily sick of a steamboat and glad to again set foot on shore.

From long confinement and irregularity diarrhœa became very severe, and for the first week I began to fear we were going to have serious trouble. But as soon as we began to advance and leave the Tennessee river, and the men could get their meals regularly, diarrhœa began to diminish. At the present time the command is encamped on high rolling or ridge land in timber, which affords good shade from the hot sun, and the health of the left wing is very good indeed, and constantly improving. I am unable to speak regarding that of the centre and right wing, only from what I heard a General say to-day regarding his own division in the centre. He stated the health of his men was good and every day improving, now they have got away from the river and the effluvia arising from the old battle-field. From the condition of our own command, and all circumstances combined, I judge that the health of this whole great army is very good, and every day getting better.

It is true that there are a good many sent back down the river to hospitals, and there are still some left at Pittsburgh and Hamburgh landings; still to one long accustomed to see sick crowds and such an immense force together as is congregated here, I think the sickness very moderate, and we have every reason to congratulate ourselves on the present sanitary condition. Of one thing I am quite certain—let ours be called good or bad, I learn from reliable sources that that of the enemy is far worse; and in every place we have occupied of theirs they have left indubitable traces behind that disease and death have reaped a rich harvest.

The diseases most prevalent here are diarrhœa, some dysentery and intermittent fever, and also some conjunctivitis. The diarrhœa is most troublesome, though of a mild character, and but very few cases, as yet, have proved fatal. I notice one peculiarity about it, that it is attended with great languor and feeling of debility and prostration, and, as the boys say, "weak in the knees." This feeling is not dependent upon frequency of stools, as I know from experience, but I judge it is in proportion to the miasmatic influences upon the system. Those cases feel it most who are most susceptible to that impression, consequently quinine is freely used in its treatment. I have had occasion to use nearly all the remedies recommended, and of these I find opium stands at the head, and then one can combine it with bismuth, acetas plumbi, and tannin. In many cases rhubarb and soda combined act like a charm, and in others dilute sulph. acid seems to produce a like effect, and with continued diarrhœa Fowler's solution often acts admirably.

The wounded of the battle of Friday last, in which the enemy attacked our advance and final y retired, have mostly been sent to Hamburgh and shipped down the river. The severest cases are here as yet, and mostly doing well. We are daily expecting to have a general fight, yet I should not be surprised if it did not come off for even two weeks yet, but when it does come look out for hard work. It is said that doctors, nurses, and general supplies, are abundant at the river, having been sent out by the different states in anticipation of a great battle.

Yours truly,
CHARLES H. RAWSON,
Surgeon 3d Divis. Army Miss.

NEAR CORINTH, May 12, 1862.

COMPLIMENT TO A VOLUNTEER SURGEON.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—I send you the accompanying correspondence between the medical staff stationed at Newport News, and the medical inspector at Fortress Monroe, by way of illustrating that the labors of the volunteer army surgeon are not always unappreciated. A few days before the action between the Monitor and Merrimac, Dr. Eisenlord was promoted to the charge of the brigade hospital at Newport News, and was on duty at the time the fight took place. The number of the wounded, and the character of their wounds, were such that the most untiring exertions were called for from all concerned in the care of the suffering ones. Among other capital operations eight or ten amputations were performed. I submit, sir, the following, which will speak for itself, premising that I am confident the compliment was well earned.

Yours, etc.,
SURGEON.

FORTRESS MONROE, VA., May 21, 1862.

CAMP BUTLER, NEWPORT NEWS, VA., March 10, 1862.

SIR:—Under circumstances with which you are well acquainted, we, the surgeons and assistant surgeons doing duty at this station, respectfully and very particularly recommend to your notice, Surgeon A. M. F. Eisenlord, of the 7th N. Y. Vols. We do so on account of the good services which he has rendered for the last two days (in the action between the Monitor and Merrimac), and also on account of the valuable assistance we have received during our arduous labors. It is but an act of justice to him and an advantage to ourselves, to lay these facts before you our medical director, etc.

Respectfully yours,
JOSIAH CURTIS, Brigade Surgeon.
DR. CHAS. GRAY, Surgeon 11th N. Y. Vols.
" L. MCLEAN, " 2d " "
" H. B. WHITTEN, Assist. Surg., 2d N. Y. Vols.
" J. STEENBORG, " " 1st " "
" JOHN HOWE, " " 1st " "

To JOHN M. CUYLER, M.D., Surgeon U. S. Army, and Medical Director, Fortress Monroe, Va.

HEAD QUARTERS, MEDICAL DEPARTMENT,
FORTRESS MONROE, VA., March 12, 1862.

DEAR DOCTOR:—I really rejoice to hear such good accounts of Surgeon Eisenlord. Please congratulate him for me, and say that the communication sent me by you has been presented to the commanding general, and I will send it to the surgeon-general of the State of New York. I take great pleasure and pride in doing justice to all.

Yours truly,
JOHN M. CUYLER, Ft. Monroe, Va.

To Brigade Surgeon JOSIAH CURTIS,
Newport News, Va.

Medical News.

SIR BENJAMIN BRODIE.—At a meeting of the Council of the Royal College of Surgeons of England, on the 5th inst., it was unanimously resolved that the following address should be forwarded to Sir Benjamin Brodie:—"The Council, in accepting the resignation of Sir Benjamin Collins Brodie, express their unfeigned regret at the loss of his services in maintaining at all times the dignity and efficiency of this College. At the same time, they desire to record their estimation of his high professional character, evinced by researches which have contributed to enlarge the boundaries of science, and enhanced by offering, in the course of a long and successful career, an example of conduct calculated by its adoption to elevate the surgical profession in the respect and esteem of society. The Council fervently trust that Sir Benjamin Brodie may long enjoy the well-earned fruits of his unblemished reputation, and the priceless satisfaction of having conscientiously discharged his duties. Cæsar H. Hawkins, President. Royal College of Surgeons of England, May 5th, 1862."—*British Med. Jour.*

THE NORTH EASTERN DISPENSARY.—This new institution is now organized and in very successful operation. It is situated at the corner of Lexington avenue and 51st street. Dr. Alexander Hadden is the house physician, and Dr. F. A. Thomas the visiting physicion. The following are the attending physicians: Drs. Geo. F. Shrady, E. H. Davis, Ellsworth Eliot, P. W. McDonnell, Seth Geer, H. M. Brush, Guido Furman, P. de Marmon, J. R. McGregor, Charles W. Packard, J. H. Hinton, J. L. Little. The dispensary is open daily from 9 A.M. to 4 P.M., and is destined to furnish medicine and advice to that portion of the city comprised between 6th Avenue, East River, and north of 40th street, so far as the Board may from time to time direct.

MURDER BY A LUNATIC.—An inquest was held at Mullingar recently on the body of a lunatic named Cunningham, who was strangled by another inmate of the lunatic asylum. There were four in the same dormitory. The murderer, Sarrell, who had become very quiet, rose from his bed in the dead of the night, and, stealthily approaching his companion while asleep, killed him almost instantaneously, and was attempting to do the same with another inmate, when the keeper's attention was aroused. The latter then became the object of a fierce attack, and the infuriated maniac was overpowered and secured with great difficulty.—*Lancet.*

THE SEX OF EGGS.—M. Genin, in a communication lately addressed to the Académie des Sciences on the subject of the sex of eggs, states that after a careful study of the subject for three years, he is convinced that those which contain the germ of the male have wrinkles on their smaller ends, while those which are to bring forth females have smooth extremities.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE PACIFIC.—The fourth commencement of this institution was held March 13th, 1862, and the degree of Doctor of Medicine was conferred on five candidates. The daily attendance on lectures is reported to be twice as large as ever before.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 19th to the 26th day of May, 1862.

Deaths.—Men, 87; women, 99; boys, 116; girls, 102—total, 404. Adults, 186; children, 218: males, 203; females, 201; colored, 10. Infants under two years of age, 145 Children reported of native parents, 28; foreign, 160.

Among the causes of death we notice:—Apoplexy, 7; infantile convulsions, 29; croup, 15; diphtheria, 4; scarlet fever, 21; typhus and typhoid fevers, 10; consumption, 68; small-pox, 7; dropsy of head, 9; infantile-marasmus, 19; diarrhœa and dysentery, 7; inflammation of brain, 13; of bowels, 9; of lungs, 26; bronchitis, 9; congestion of brain, 12, of lungs, 5; erysipelas, 6; whooping cough, 5; measles, 1. 282 deaths occurred from acute diseases, and 37 from violent causes. 279 were native, and 126 foreign; of whom 76 came from Ireland; 91 died in the City Charities; of whom 14 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

May, 1862	Barometer. Mean height.	Barometer. Daily range.	Temperature. Mean	Temperature. Min.	Temperature. Max.	Difference of dry and wet bulb. Thrm. Mean	Difference of dry and wet bulb. Thrm. Max.	Wind.	Measurement of cloud.	Humidity Sat'tion, 1000
	In.	In.	°	°	°	°	°			
18th.	29.80	.24	70	62	73	8	11	NE. to SE.	4	600
19th.	29.70	.20	66	52	80	7	11	N. to NW	6	620
20th.	29.94	.10	60	50	70	7	11	N.W. to S.	3	600
21st.	29.97	.07	58	62	54	4	5	N.E.toS.E.	10	810
22d.	30.00	.04	70	62	81	8	13	S.W.	3	600
23d.	30.00	.04	72	60	88	9	11	SW.toNW	2	590
24th.	30.10	.10	59	46	70	8	10	N. to S.	2	533

REMARKS.—18th, Cloudy, P.M., with fresh wind. 19th, Variable day, with fresh wind, P.M.; very light rain at ten A.M. 20th, Fresh wind A.M., cloudy P.M. 21st, Light rain early A.M. and P.M.; fog at sunset; lightning late P.M. 22d, Thunder, lightning, and rain at 3 A.M.; sultry day; clear, with fresh wind, evening. 23d, Sultry; tempest with rain at 4 P.M.; much more rain fell north and south of 7th Ward, than at the place of these observations; evening, clear and pleasant. 24th, Day mostly clear; wind fresh, P.M.

MEDICAL DIARY OF THE WEEK.

Monday, June 2.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Thomas, half-past 1 P.M.
- Eye Infirmary, 12 M.

Tuesday, June 3.
- Bellevue Hospital, Dr. Loomis, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
- New York Hospital, Dr. Markoe, half-past 1 P.M.

Wednesday, June 4.
- New York Hospital, Dr. Cock, half-past 1 P.M.
- Bellevue Hospital, Dr. Sayre, Is. Hos., half-past 1 P.M.
- " " Dr. Flint, Is. Hos., 3 P.M.
- Eye Infirmary, 12 M.
- New York Academy of Medicine, 8 P.M.

Thursday, June 5.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Barker, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Friday, June 6.
- Eye Infirmary, 12 M.
- Bellevue Hospital, Dr. McCready, half-past 1 P.M.
- New York Hospital, Dr. Markoe, half-past 1 P.M.

Saturday, June 7.
- New York Hospital, Dr. Cock, half-past 1 P.M.
- Bellevue Hospital, Dr. Wood's Clinic, 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M

SPECIAL NOTICES.

New York Sanitary Association.—*A Stated Monthly Meeting of this Association will be held at 8 P.M., Thursday, June 5th, at Room No. 19, Cooper Institute.* Dr. Lassing *will present, preliminary to the resuming of the discussion of the subject which was laid over at the last meeting, "A description of a Plan for the Control and Suppression of Venereal Disease." Friends of members are respectfully invited to attend.*

New York County Medical Society.—*The Stated Monthly Meeting of this Society will be held at the College of Physicians and Surgeons, cor. Fourth Avenue, and Twenty-third street, on Monday next, June 2d, at 8 o'clock P.M. Scientific communications and discussions expected. The profession are respectfully invited to attend.*

New York Academy of Medicine.—Dr. A. Clark *will continue his remarks on "Albuminuria" on Wednesday Evening, June 4th.*

Surgeon-General's Office,
Washington, May 10, 1862.

An Army Medical Board will assemble in Washington, D. C., on the 1st of June next, for the examination of applicants for admission into the Medical Corps of the Army. In addition to the ordinary requirements of moral character, medical and surgical knowledge, good academic education, and sound physical condition, the applicants must be familiar with the principles of hygiene and the conditions necessary to the health of the troops in hospitals, camps, and transports.

Applications must be addressed to the Secretary of War, through the Surgeon-General; must state the residence of the applicant, and the date and place of his birth. They must also be accompanied (references will receive no attention) by respectable testimonials of his possessing the moral and physical qualifications requisite for filling creditably the responsible station, and for performing ably the arduous and active duties of an officer of the Medical Staff.

Applicants must be between *twenty-one* and *twenty-eight* years of age.

No allowance is made for the expenses of persons undergoing these examinations, as they are indispensable prerequisites to appointment; but those who are approved and receive appointments will be entitled to transportation on obeying their first order.

There are now, and soon will occur, several vacancies in the Medical Staff.

Dr. Elisha Harris

has removed to

No. 43 EAST TWENTY-THIRD STREET,

Between Fourth Avenue and Madison Square.

Dr. Nœggerath

has removed his office to

125 WAVERLEY PLACE.

Dr. Julius Homberger,

Speciality: Diseases of the Eye,

has removed to

24 West 12th Street.

Office Hours: { From 9—11 A.M. " 5—6 P.M.

John W. Shedden, Apothecary,

368 Bowery, cor. 4th St.

Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

P. W. Bedford,

PHARMACEUTIST,

removed to

745 Sixth Avenue, near Forty-fourth Street,

Opposite Sixth Avenue Railroad Depot.

Wm. H. Davol, M.D., late Physician to L. I. College Hospital, Brooklyn, removed to St. Paul, Minn.

References.—C. L. Mitchell, M.D., T. L. Mason, M.D., Prof. E. N. Chapman, M.D., of Brooklyn; Prof. Austin Flint, M.D., Prof. B. F. Barker M.D., of New York.

To Physicians.—For Sale: a large county and village practice with a half interest in a drug house, in Greene, Chenango Co., N. Y. For particulars inquire of M. M. Wood, Greene, Chenango Co., N. Y.

THE FIRST NUMBER OF THE

American Journal of Ophthalmology

JULIUS HOMBERGER, M.D., Editor.

WILL BE OUT IN THE COURSE OF THIS MONTH.

CONTENTS.

On Diphtheritis of the Conjunctiva. By Dr. Graefe.
On Strabismus Concomitans. By the Editor.
The Universal Society of Ophthalmology.
Journalistic Reports.
Paris Correspondence, etc., etc.

Subscription Price for one year (six numbers), $2.00; sample numbers, 25 cents.

BAILLIERE BROTHERS,
440 Broadway, New York.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians* (*principally country Physicians*) *Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonsparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bonrbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, whore the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy*.

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations*, *Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyoscianus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is daily attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.

Session 1860-61.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Lecture IX.—Part I.

Infantile life is remarkable both for its number and variety of cutaneous affections. Even fœtal life is not exempt; partial absence of cutis, anomalies in its formation (nævi), and the results of plastic inflammation to such an extent as to render atrophic, and even amputate limbs, beside others, are not at all unusual. The first period of infancy develops a number of cutaneous affections, the first predisposition of which has been given in the development of the skin during fœtal life, viz. ichthyosis, prurigo, and syphilides. Induration of the cellular tissue, oftentimes depending on refrigeration of the skin soon after birth, sugillations resulting from difficult deliveries, and the results of insect bites, belong to the earliest age.

Erythematous inflammations of the surface, and more general inflammations of the cutis complicated with more or less deep erosions—intertrigo—are frequent occurrences in infancy. They belong mostly to such infants as are wanting in cleanliness, especially those in whom urine and fæces are allowed to remain in contact with the skin, while at a more advanced age the development of large quantities of fat in the subcutaneous tissue, frequently combined with scrofulous tendencies, and anomalies in the nature of intestinal excretions, are more frequently attended with such a result. Uncommonly high color of the newborn—erythriasis—is sometimes seen after too protracted a labor, and pressure on the infantile cutis, or resulting from warmth of the first baths. Erysipelatous inflammations of the skin, obstructions and inflammations of the sebaceous follicles—furuncles—are sometimes primary, sometimes secondary results of either inflammation and suppuration of the umbilical vein, or pyæmia of the mother, or traumatic injuries. The sebaceous follicles particularly give rise to trouble in this early age. Being excessively active, and most abundant on the scalp, the secreted tallow, mixed with epidermoidal scales and extraneous matter, forms what has frequently been called an eruption—seborrhœa. Miliaria is frequently seen on infants during summer, after warm baths, in hot rooms and bedding (prickly heat). Strophulus, papulous erythema, local pityriasis, nettle rash, roseola, eczema, and impetigo, are frequent occurrences both in infancy and childhood. Herpes is occasionally observed, especially in the course of acute feverish diseases; fevers, gangrene, itch, are sometimes seen from persistent want of cleanliness; prurigo, psoriasis, lupus, and carcinoma are rare, but occasional, exceptions.

Many of the cutaneous affections, more or less common to all ages and either sex, have not been mentioned here, but enough has been said to prove the frequent occurrence of both severe and mild forms of diseases in the infantile skin. It is but natural that it should be so. For there is no organ of the infantile body which, after having been protected from external influences during fœtal life, is so suddenly called to unaccustomed action and unwonted external influences and injuries, as the skin. A fine illustration of this fact is given by what has been called jaundice of the newborn. The sudden change in the circulation of the newly born, and the irritation produced by the influence of the atmosphere, and the consequent injection of the vessels of the surface, give rise to the high red color of the cutis so commonly seen during the first short period of infantile life. Transudation of hæmatine will usually take place; the amount of which, and the locality of its deposits, and the normal physiological transformations (so well observed in erosions, sugillations, and hæmorrhage from any cause), determine the greenish yellow color of the skin and sclerotica of infants after the third or fourth day. Thus this spurious jaundice has given rise to the impression in the eyes of many who do not know, or have not seen, the dangerous symptom of icterus attending inflammation of the umbilical blood-vessels and pyæmia, that jaundice of the newborn is an almost necessary, and always innocent disease. In the majority of cases they are right, certainly; for this majority are discolorations of the surface brought on by the physiological transformation of the composition and color of transuded blood, and require no treatment nor particular care, while those fortunately not very frequent cases of real icterus resist every treatment and care.

I may state here at once that hyperæmia of the cutis is the principal cause, nay the only one, of a large number of different forms of cutaneous diseases. This condition partially depends on increased action of the heart and arterial pressure, partially on lessened function of the centre of circulation, and venous obstruction. Hyperæmia of the skin may be local or general, slight or considerable. Therefore it is, that the same cause, according either to its mild or severe character, or individual impressibility, or its seat in superficial or deeper layers, may give rise to different forms of exanthems. It is, in accordance with this, a peculiarity of the infantile organism, that the character of diseases generally is in a large measure determined by the liability to hyperæmia, local processes depending on hyperæmia and exudation being greatly more numerous than in advanced life. Therefore it also happens that many cutaneous diseases, although we do not know of many exclusively peculiar to infantile age, afford quite a different appearance, and exhibit a different course from what is observed in the same form of disease in the adult.

I have said that the same cause may produce different forms known by different names in the textbooks, and that this difference of appearance depends mostly on the seat of the pathological process—hyperæmia, or exudation—and individuality. Common to all these, however, and particularly those of the first class (hyperæmia), is this symptom, that the high color of the integument is instantly removed by gentle pressure, and restored on the pressure being relieved; while hæmorrhage will not, or but little, change its color, nor exudation lose its painfulness, or swelling, or yellowish appearance, or superficial desquamation, either in larger flaps or small scales.

The causes alluded to are almost universally laid down, as high temperature, moisture, local or general irritants, mechanical injuries, etc. The process resulting from such causes consists of relaxation of the tissue, and consecutive dilatation of the blood-vessels. Thus, it is explained, that hyperæmia is the first symptom of almost all both the acute and chronic exanthems, before exudation takes place. And it is further explained, why, with the impressibility of the infantile cutis, almost all the acute and feverish diseases of infantile organism, in any of its parts, is ready to go along with some of the outward forms of consecutive local hyperæmia of the skin. The injected condition of the cheeks in pneumonia and acute diseases of the respiratory organs in general, is one of the proofs for it. Exanthematic typhus owes its name to the occurrence of local hyperæmias, either superficial and inoculated, or papular in consequence of exudation. The same is observed in cholera typhoid. Erythema is frequently seen in diseases of the brain, and affections of the stomach and intestinal tract are frequently complicated with urticaria. All these forms, because of their dependency on an internal cause, have been called symptomatic, while those in which the local process can be traced to a direct and immediate in-

fluence, have been baptized as idiopathic. Thus medical terminology and memory have been inundated by a large number of superfluous and bewildering, though exceedingly learned, names. I say so, because I do not believe in the retaining of such names, as for instance, erythema caloricum, erythema solare, erythema venenale, erythema traumaticum, when it is fully sufficient, and equally as scientific, both to know and to state, that the simple form of cutaneous hyperæmia, which we find convenient to call erythema to distinguish it from other forms, may be produced by *calor*, warmth, *sol*, sun, *venenum*, poison, and *trauma*, wound.

Since the time of Dr. Simon, of Berlin, whose clear understanding and studious habits the world prematurely had to bury within the gates of a lunatic asylum, all the forms of exanthems depending on either hyperæmia alone, or exudation, have been comprehended by the term of dermatitis—inflammation of the skin. Although this term may not appear to be appropriate to all cases, it is certainly true, that by following his example the terminology of cutaneous diseases otherwise so complicated and embarrassing has been greatly simplified. Thus erythema, erysipelas, herpes, urticaria, eczema, impetigo, lichen and strophulus, and prurigo, are easily recognised in their anatomical and physiological differences and similarities, in some simple hyperæmia, in some exudation either in or upon the cutis, being the prevailing element. A schematic exposition of the above views is readily understood in the following classification:

Erythema. Superficial acute dermatitis. Without formation of vesicles. Uniform.
Erysipelas. General acute dermatitis. With formation of blisters. Uniform.
Herpes. Superficial acute dermatitis. With formation of vesicles. Location limited. Typical course.
Urticaria. Superficial acute dermatitis. With formation of papulæ.
Eczema. Superficial acute dermatitis. With formation of vesicles. Diffuse. No typical course.
Impetigo Superficial acute dermatitis. With formation of pustulæ. Copious development of young cells.
Lichen (strophulus). Acute dermatitis. With formation of conical noduli, mostly in groups.
Prurigo. Acute dermatitis. With formation dispersed in groups, small and flat, and itching noduli.
Roseola. Superficial acute dermatitis. With formation dispersed.

These forms of cutaneous eruptions are, more or less, those which are by very many authors, and the public generally, attributed to the influence of dentition. To judge of the truth of such assumptions, we shall be enabled by either the affirmative or negative answer to a number of distinct questions. The nature of these answers will show if there is, in our case, any truth for the "*post hoc*," or rather "*cum hoc*," "*ergo propter hoc.*" These questions are these: Is there, between the protrusion of a tooth, and the appearance of the above mentioned cutaneous eruptions, a mere coincidence, or a direct causality? Will these eruptions show themselves with the swelling of the gums? Will they disappear with or after the final protrusion of a tooth or a group of teeth? Will they return with a renewed attempt of another tooth, or group of teeth, to break through the gums? If there is a correlation, which is it?

The nature and etiology of those eruptions will finally help in deciding the above questions.

Surgeon William S. King, long Medical Director of General Banks's corps, has been detached and placed in charge of hospitals in Philadelphia.

The Homœopathists have a hospital in Washington, and are calling loudly for donations and contributions. It is to be hoped that its patrons will not contribute according to the hon œopathic principle—that the higher the dilution the more potent the remedy!

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,
PROF. OF PRACTICE AND PATHOLOGY.

The term, Bright's Disease, it is said, is generally used by the profession, to designate diseases which are essentially different in character. With this proposition, which has been authorized by good pathologists, I am disposed to take issue. I do not believe that the different conditions of the kidney indicate diseases which are really different in their character. It is the custom now to write and speak of this affection as presenting itself in two quite distinct forms: the *large white kidney* and the *small contracted kidney.* Both these forms were recognised and described by Bright himself. Wilks (Guy's Hospital Reports, vol. viii., p. 233, 2d Series) made this distinction the basis of his classification, adding three other forms. One which he denominates the "coarse kidney;" another in which he finds fibrous tissue in excess, but in which there is no contraction; and a third which he calls the "simple fatty degeneration," but says at the same time, that it has nothing to do with Bright's disease. Now, Sir, with reference to this matter, it seems to me that the large white kidney, which is exceedingly well characterized in its appearance, and which has its own particular symptoms, is, after all, but the result of a diseased action, which, by a little modification, can produce the small and contracted kidney, and that Wilks's additions are intermediate forms, and really the preparations in the kidney for one or other of these two characteristic conditions. I suppose it is proper to say, that Dr. Bright himself, in the paper which he published in *Guy's Hospital Reports*, in the year 1836, page 381, while he seems to prefer the opinion that these different forms are really different stages of one disease, still holds the following language: "There may, however, be some reason to doubt whether the different states of the organ are not rather evidence of modifications in the diseased action, than correct indications of the duration of the disease." That, I believe, is the true view, Sir.

With reference to the different forms of the disease, the Academy may get some definite ideas of what I mean by some very accurate drawings which were specially made for me some years ago. This is the large white kidney of Wilks and Goodfellow, and here is another of the same character. The upper one of these two represents the contracted kidney, while the under one shows an intermediate state, not the contracted, lobulated, or "hob-nailed" kidney like the one above it. Here are the external and sectional views of two which are white but not enlarged; and here are three which are neither white nor enlarged, but yet are seriously diseased. That, for example, looks like a healthy kidney to the naked eye; it is, however, a diseased organ. This one would hardly be regarded as a diseased kidney, and yet it was one which gave albumen during life and produced death. This one is the horse-shoe kidney, formed by an isthmus of kidney structure across the spinal column which unites the two kidneys into one organ. The weight of these united organs is not quite equal to that of two healthy kidneys. I have had the section of the isthmus represented in order to show that it is true kidney or secreting structure. The color was unusual, an olive or greenish slate; it was studded with brown and dark grains of hæmatoidine. One portion of the double kidney is represented as unopened, the other as opened. Both parts were studded with very minute pits. Albumen had been noticed in the urine for a considerable time previous to death. The patient had œdema. It is of the fibrinous or small variety, although it is not markedly diminished in size.

I will not at present enter upon the minute anatomy of these two forms, the contracted, or small or fibrous, and the large soft or white kidney, but will reserve it for a

future period, perhaps a future evening. My aim at this moment is merely to state that while we have these two apparently very distinct forms, and while one, as will be seen before we get far on, is attended by particular symptoms, so that it can be recognised, and the other as frequently is not recognised at all, or only in its last stage, they are yet substantially the result of the same diseased action; and that the intermediate conditions that have been called waxy and the firm kidney, etc., where there is no change in size, are really the result of the same kind of disease, in some going on towards the large white kidney, and in others tending to become the contracted kidney. It is true that waxy kidney is spoken of in connexion with albuminuria, but out of a record of thirty microscopical examinations of kidneys affected with Bright's disease, preserved in this book, only one could be regarded as having undergone the waxy degeneration in any degree. Indeed, in this the cells had not undergone the waxy transformation at all. It was a fibrous kidney with a waxy appearance of the fibres. I have seen the true waxy kidney, but its occurrence is exceedingly rare, and at present it may properly be questioned whether albuminous urine is one of its symptoms, or whether it has any more affinities to the disease we are considering than a cancerous or tuberculous kidney has. Kidneys often have a waxy appearance without having undergone in the slightest degree the true waxy degeneration. This is often seen in the firm fibrous kidney. The fatty kidney is spoken of, and it is made into a class by itself. The propriety of making a section for the fatty kidney seems to me, to be, at least, questionable. I do not believe that there is any such degeneration in the kidney or any part of the body that is not a mere accident, that is not the result of a certain diseased action that should have another name. In the cases that I have here recorded, thirty in number, some of the kidneys that were most diseased did not contain one particle more of oil than in health; while in other cases, where the disease was inconsiderable, the oil existed in great abundance, and in two or three instances where the kidneys were not materially changed in size and where the disease was of short duration, there was still a large amount of fat in the organ; and in these instances there were abundant evidences that there had been congestion of a very marked character, so marked that where the kidney was left to drain without being permitted to dry (by being wrapt in oil-silk), in one instance the weight was diminished one and a half ounces, in another instance three, and in another two. I look on the fatty degeneration as the result partly of the diseased action which in one instance will produce the large white kidney, and in another the contracted or "hob-nailed" kidney, as the case may be, and partly of a general condition of the system which favors fatty deposits in other organs as well as in the kidneys. As, however, it does not appear to exercise any unfavorable influences on the function of the organ, except where it is extreme (*i. e.* fatty degeneration), it seems to me better to throw it out of the classification and consider it as an accident.

Passing from this topic, we shall take up the consideration of the frequency of Bright's diseases of the kidney, in which a great deal of its importance is to be found. There is an impression now that the disease is growing more frequent, especially among those who are turning their attention to the subject. I have thought that it might be of sufficient interest to the members of the Academy, to note what Dr. Bright said of its frequency at the time he first observed the disease, as this will show that the supposed increase is only apparent. In the paper before alluded to, he remarks, that the importance of this subject grows upon him as he studies it, and that he has been able to make, for the most part himself, one hundred post-mortem examinations, in a limited time; that he finds in each of the Hospitals of London there are hardly ever less than twenty cases at a time, and believes that at any time forty cases may be found in Guy's Hospital alone. Further on he says, that to instruct himself upon this point, he examined the urine of one hundred and thirty patients in his wards in the hospital, without reference to the nature of their diseases, and that he found out of these hundred and thirty that eighteen had a considerable quantity of albumen in their urine, and that twelve more had an appreciable quantity, and he reckons that in those wards at that time there were from one-sixth to one-fourth of all the cases that had albuminuria, and more or less of kidney diseases. Similar remarks to the end that the disease was found in very considerable amount can be found in Christison, Rayer, and indeed in every writer who paid particular attention to it early. We now see nothing more than they saw. Ten years ago I was able to point out to the students at Bellevue Hospital in one single day fifteen well marked cases of albuminuria, and to give the histories of each of them on successive days.—At this moment in the hospital among sixty-seven male patients there are five well marked cases, and no search has been made into the condition of those in whom the symptoms are not marked or obtrusive. These remarks tend to two points—one I have already stated, and the other is to show us how important the disease is and how frequently it may exist in the practice of every physician. I may now add that any physician in private and public practice, who seeks for the disease, will find it a great many times where he does not suspect it.

(To be Continued.)

ON THE IMPROVEMENT OF THE CONDITION OF THE INSANE.

By JOHN B. CHAPIN, M.D.,

BRIGHAM HALL, CANANDAIGUA, N. Y.

It is a reasonable presumption when the Committee of the Legislature which reported the bill for the creation of the State Lunatic Asylum expressed the conviction that the State should erect "hospitals adequate in number and extent to accommodate all our insane," they announced what they believed ought to be, and would become, its policy in after years. To what extent these expectations have been realized, and wherein laws, which were enacted to subserve the important interests of the insane, as was supposed, have been shown in practice to be ineffective for this purpose, we have endeavored in a previous number to point out. It remains then to inquire, as we proposed, what plans and suggestions for the improvement of the condition of the insane experience and practice may devise. In doing so we must never lose sight of the fact, that insanity is a condition of disease susceptible of treatment, cure, and amelioration. In dealing with it otherwise, ignorance of its nature at once begets the irregularities which go to make up the abuses of the insane.

The defects which are most apparent, and out of which the evils of the present system of caring for the insane mostly grow, are:—

1st. The existence of a Statute under which patients may be transferred from the State Lunatic Asylum and placed in the county poor-houses at the expiration of a certain period of their residence there, notwithstanding recovery has not taken place.

In a previous article it was remarked that the fear of impairing the usefulness of the State Asylum, by overcrowding, induced such a modification of the law as to provide for the discharge of indigent patients after a certain lapse of time. The institution did become crowded very soon after completion. The State was exceedingly tardy in making any provision for its insane, indeed, behind Ohio, and other States second to it in resources and population, It could hardly be expected that a single hospital would be able to accommodate the insane of a populous and rapidly-growing State. Why, then, should legislation on this subject have reference to a hospital of fixed proportions, and universally conceded to be large enough, in the hope that some plan might thus be devised to cause it to answer all future purposes? Yet, strange as it may seem, all the legislation which has been had to

provide more generally for the insane, has been the passage of the amendment, heretofore alluded to, which virtually permits one insane person to be removed from the State hospital for the purpose of receiving another. Of a given number of recent cases the majority will recover. Let us, however, suppose the case of a patient of the pauper or indigent class admitted into the State Asylum. He passes through the acute stage of disease, and is left with his mental faculties impaired. He becomes industrious and useful about a farm. He occupies a quiet ward, and under the regular operations of the institution is in a comfortable state of mind. Yet, in due course of time, or at the expiration of his allotted term, he is removed to a county-house —a building without a single arrangement or association to conduce to his comfort and care, and utterly repugnant to his feelings. Others, who are violent or helpless—and of all classes they most require those humane regulations which intelligence and science devise—pass their allotted ordeal and fall to the county officers, as incurables again, to provide for. They are sent to the county poor-house where the insane are provided for without classification, and with such restraints as will reduce the amount of attendance to the least degree. One result of this practice is, that county officers, finding themselves obliged to care for a certain number of insane persons of the incurable class, at length venture upon the reception into the poor-houses of acute cases. Another result is the legalization of these receptables for the care of the insane, thus threatening to undermine the humane policy of earlier years. A system, which takes care of the insane person during the acute stage of his disease, and virtually turns him out of an asylum incurable and helpless, is not a comprehensive one, fails to answer a desired end, and requires amendment. Are we not warranted in asking that this be brought about, and that all laws causing or permitting a patient at the public charge to be discharged from the State Asylum before recovery has taken place, when by such discharge such patient is liable to be placed in a poor-house, should be repealed?

2d. The division of the insane poor into an indigent and pauper class, by which a discrimination, based upon property, exists, operating often to the disadvantage of the latter, is an evil which ought to be corrected. It may have been thought necessary to place the custody of all paupers in the hands of the Superintendent of Poor. Other reasons, of which we are ignorant, may have existed for this discrimination. It is, however, of vital importance to the patient whether he is to be disposed of by the County Judge, or a Superintendent of the Poor. The latter officer is so often liable to be influenced by motives of a selfish and economical character, so inconsistent and incompatible with a proper and humane consideration of a condition of disease, as to incapacitate him for an independent discharge of his duty. It should be borne in mind that poverty is one of the concomitant circumstances of insanity, and not, as a usual thing, antecedent to it. The great majority of the insane poor are not paupers in the ordinary use of that term. It is shown in a report of the Secretary of State that eighty-two per cent. of the insane poor in the county poor-houses were self-supporters prior to the attack; and, out of four thousand cases of insanity treated in the asylums of this State, we found the small number of seventy-four without occupation. Insanity has been properly ascribed to be one of the causes of pauperism, and not the result of it. This is the true relation of insanity to pauperism.

3d. The discretionary power possessed by Superintendents of the Poor of sending patients to the asylum or poor-house, and the legalization of such places as receptacles for the insane. This arises from the power vested in Boards of Supervisors of approving of an asylum, other than the State Lunatic Asylum, for the insane poor. There being but one asylum in the State where such patients can be received, it is implied of necessity that they must go to the poor-houses. Among the conditions on which recovery from insanity depends, no one of them is more essential than the stage in which the patient is placed under treatment. It is important this should be done as soon after attack as is consistent with safe removal from home. In the case of the pauper patient, as well as the independent, the community, the family, and the individual, are interested in his restoration. The support of the former devolves upon the public treasury. It is obvious that as soon as he is restored he ceases to be a public charge, and, if through inattention, or the nature of his disease, he becomes incurably insane, he is a lifelong expense. We are then appealed to by motives of humanity and charity, to rescue persons thus afflicted from the physical and mental degradation insanity sometimes brings. We are urged by those ties of reciprocal duty which bind all communities together, as well as by motives of political economy, to afford every recent case of insanity a seasonable opportunity of treatment. The discretionary power of sending patients to an asylum cannot be lodged, safely, with public officers who are elective and influenced by various motives, without abuses and irregularities necessarily resulting. It has been exercised under mistaken views of economy; also, that the poor-house possessed the requisites of a hospital; and, again, the supposed curability or incurability of the patient has decided the disposition of the case. It will thus be perceived, how it happens that the practice of different counties varies with the change of officers. May we not properly ask whether under these circumstances human judgment is not fallible? And, whether such important interests as the well-being of the insane should be intrusted to the caprice and decision of an individual, or ought not rather to be guarded and protected by some general law, universally applicable, giving to the officer functions of a character purely executive and not discretionary?

The more prominent defects of our present system, which are here briefly presented, are to be remedied:—

1st. By a repeal of the statute permitting the discharge of a public patient from the State Lunatic Asylum, in an incurable condition, and authorizing the return of such patients to an alms-house.

2d. By the abolishment of the division of the insane poor into an indigent and pauper class.

3d. By taking away all power now possessed by Superintendents of Poor of *disposing* of the insane. On the occurrence of a case of insanity in a person presumed to be in indigent circumstances, the question of the existence of insanity should first be determined before two Justices of the Peace, or a County Judge. For this purpose they should have the concurrent testimony of at least two physicians. They should then examine into the alleged indigence of the patient. If found insane they should so certify, which certificate should be an order of admission into the State Lunatic Asylum, at the expense of the county from which sent. Such proceedings would be simple, uniform, and inexpensive.

4th. By the appointment of a Commission of Lunacy.

While these changes are of such a nature as to commend themselves to the friends of the insane, it becomes our duty to inquire into the probable result of such radical alterations in our present system. In the first place, all recent cases of insanity would receive an order of admission to the State Lunatic Asylum, and would be received as far as the capacity of the institution would permit. The remainder would have a claim upon the State which it could not long ignore. Secondly, the effect of the proposed changes would be the accumulation of incurables in the State Asylum. The chief difficulty in a comprehensive system for the care of the insane lies in the proper disposition of this class. Our duty in regard to the new cases is clear. The real problem is to know what to do with the incurables. The history of every case presents the stage of active disease from which the patient emerges to a condition of health, or of incurability. In the latter condition he is either turbulent, noisy, or filthy in habits; or quiet, harmless, and industrious. He does not require the expensive style of hospital building, its extensive medical and

household organization. It has been objected that the support of incurables in hospitals with all the appointments and detail of curative establishments, was a greater expense than was warranted. This has been adduced by county officers as a cogent reason for the removal of patients. Instances could be cited where county officers visiting patients at the Asylum chargeable to their county, on learning they were able to perform some labor, and in a comfortable and quiet condition, have removed them, confined them to the county house, or permitted them to escape, though incurably insane. That condition, which has been attained only with great pains and expense, may thus speedily be changed for the worse.

The Asylum, at Utica, should assume its originally-designed relation to the insane as a curative institution, and some provision be made for the discharge of incurables, and their proper and humane care. Availing ourselves of the fact that the majority of incurables and chronic cases, in an agricultural community, may with attention become industrious, perform the manual labor of a farm and domestic work within doors, may not an organization upon an industrial basis be devised, embracing such of this class as the Superintendent of the State Asylum may designate for the purpose? This organization would in other words constitute a colony from the hospital. We are aware that a proposition to erect institutions for the accommodation of incurables is liable to meet objections at the hands of some members of the profession devoted to the specialty of insanity. The question of caring for curables and incurables, in separate institutions, has been a subject of discussion, without, however, as far as we are aware, developing any plan for ameliorating the condition of the latter class. It has seemed to us that an institution based upon an organization of an industrial character, seeking to employ every member of the household in some occupation tending to reduce the cost of support, and yet seeking by regularity of habits and varied work to bring about a condition of cheerfulness and contentment, could do very much to alleviate their unfortunate condition, and make the burden of life more tolerable. We might have regarded this plan as chimerical, if it were not in successful operation at the present time. Explaining by conversation and correspondence the defects of our system to Dr. Pollak, of St. Louis, long identified with the public institutions of that city, he promised to bear this subject in mind in the course of his projected visit to Europe. He has kindly placed in our hands the history and plans of the Asylum and Colony of Fitz James, Clermont, France, which we find contains suggestions and ideas which we believe solve the question of the disposition of the incurable insane, especially as their wisdom has been confirmed by a successful experience of twelve years.

The subject which we have endeavored to bring before the profession through the medium of this Journal, though not a novel one, deserves more attention at its hands than it has received in latter years. Those persons whose official relations to the insane have enabled them to become familiar with their wants, particularly the present Superintendent of the State Asylum, Dr. Gray, have done very much to enlighten the Legislature and the community. Notwithstanding their persistent efforts, a strange indifference and apathy still exist in the public mind. It is not too much to hope for the co-operation of the profession to accomplish results of vast sanitary importance to the people of this State, and the interests of humanity.

L'Union Medicale, speaking of the late operation performed by M. Civiale on the King of the Belgians, remarks that this is the second time a royal bladder has been submitted to the instrumentation of this skilful operator. The late King Bomba, of famous memory, underwent the same operation, and paid a fee for it of £5,000. M. Civiale, the journal adds, does not appear to have brought back from Belgium anything more than the Cross of Leopold.—*Brit. Med. Jour.*

CASES OF VAGINISMUS, WITH THE METHOD OF TREATMENT.

By J. Marion Sims, M.D.

[Reprinted from the Bulletin of the N. Y. Academy of Medicine.]

(*Continued from page* 294.)

From personal observation, I can confidently assert that I know of no disease capable of producing so much unhappiness to both parties to the marriage contract, and I am happy to state that I know of no serious trouble that can be so easily, so safely, and so certainly cured. I now venture, with the approbation of this learned body, to give this affection a name as well as a remedy.

By the term Blepharismus or Blepharospasmus, we mean an involuntary, painful, spasmodic contraction of the orbicularis palpebrarum, with great supersensitiveness or intolerance of light. By the term Laryngismus, we mean a spasmodic contraction of the rima glottidis, with stridulous inspiration. And by the term Vaginismus, I propose to designate an involuntary, spasmodic closure of the mouth of the vagina, attended with such excessive supersensitiveness as to form a complete barrier to coition. These various affections may or may not be complicated with inflammation, but do not necessarily depend upon it. We may have vesical tenesmus without inflammation of the bladder, and rectal tenesmus without rectitis. The most perfect examples of Vaginismus that I have ever seen have been uncomplicated with inflammation; but I have met with cases in which a slight redness or erythema was visible at the fourchette, just without the reduplication of the vaginal mucous membrane, called the hymen. Usually, the hymen is thick and voluminous, and, when the finger is passed into the vagina, its free border often feels as resistant as if bound by a fine cord or wire; but it may also be firm and unyielding, with even the wire-feeling free border, without symptoms of Vaginismus. There need be no mistake in diagnosis. It can be confounded only with impermeable hymen or with atresia. In each of these, marriage may have existed without consummation, but the true cause becomes patent on investigation.

In a case of Vaginismus, the gentlest touch with the finger, a probe, or even a feather, produces the most excruciating agony. The sensitiveness is at all parts of the vaginal outlet, is very great at the meatus urinarius, and on each side of it, just where the hymen taken its origin; is greater still on the vulval or outer face of the hymen, near the orifice of the vulvo-vaginal gland, and greatest at the sulcus or reduplication from the vulval orifice. Often, the most sensitive point of all is at the fourchette, where the hymen projects upwards. I have often heard patients shriek with terror and agony, exclaiming that I was thrusting a dagger into the body, when I merely touched the sensitive points with a camel's hair pencil or a soft feather; and again these same patients have declared that they felt comparatively nothing when I have had the parts held asunder, so as to pass a probe into the vagina, making forcible pressure against the internal or vaginal surface of the hymen, thus proving that, while the outer face of the hymen was supersensitive, its inner surface was normal. In all cases, the mere spasm of the sphincter is painful, and in many cases the sphincter ani feels almost as hard as a ball of ivory. Indeed, one of my patients supposed it to be a tumor to be cut out before she could be cured. The spasm of the sphincter is pathognomonic of the disease; the supersensitiveness, diagnostic. This fact is more delicately shown by touching the outer surface of the hymen, particularly at its reduplication, with a soft camel's hair pencil.

Treatment.—I shall not detain you with a rehearsal of the steps by which the proper treatment was finally determined; enough has been said already to show that it was not accidental, as my observations extended from May, 1857, to August, 1859. The treatment consists in the removal of the hymen, the incision of the vaginal orifice, and subsequent dilatation. The last is utterly useless without the others, but is essential to easy and perfect success with them.

I usually make two operations, though all may be done in one. Placing the patient, etherized, on the left side, I seize the hymeneal membrane with a pair of forceps, just at its junction with the urethra on the left side, and, putting it on the stretch, clip it with properly curved scissors till the whole of it is removed in one continuous piece. In some cases the hæmorrhage is sufficient to require a compress of lint, thrust into the mouth of the vagina, while in others it is unimportant. In two instances the bleeding was excessive, but was easily controlled by the liquor ferri persulphatis. The cut usually heals in three or four days, after which the operation for radical cure may be performed.

Notwithstanding the removal of the thick, sensitive hymen, the cicatrix marking the original place at the mouth of the vagina is excessively sensitive, and, in some instances, feels hard and tense, as if a small cord were constricting the outlet. This I formerly divided at different points, and in divers ways, during the course of my experiments, and finally arrived at the following method as being the surest and best:—

Place the patient, fully etherized, on the back, as in the position for lithotomy, pass the index and middle fingers of the left hand into the vagina, separate them laterally so as to open the vagina as widely as possible, putting the fourchette well on the stretch. Then make a deep cut with a common scalpel through the vaginal tissue on the right of the mesial line, bringing it from above downwards, and terminating at the raphe of the perineum. This cut forms one side, the left, *a b*, of a

. Then pass the knife again into the vagina, still dilating with the fingers as before, and cut in like manner on the opposite side from above downwards, uniting the two incisions at the raphe as shown by the line *d b*, which is to be extended quite to the perineal integument, and through its upper border, as shown by the dotted line *b c*. Each cut will be nearly two inches long, extending from about half an inch above the upper border of the sphincter vaginæ, across the sphincter for about half an inch, and down to the perineal raphe for nearly an inch more. Of course, this will vary in different subjects according to the development of tissue in each. To perfect the cure, the patient will wear for a time a properly adapted vaginal dilator. I use an instrument usually made of glass, sometimes of silver, or other metal silvered or gilt. I prefer glass, because it is cheap and easily kept clean, while being transparent, it is easy to see how the wound is progressing without removing the instrument. Moreover, some patients have insisted that a glass instrument is more comfortable and less irritating than one of metal. I am not prepared to say whether this be true, yet there may be both truth and philosophy in the assertion, as one substance is the worst conductor of heat, and the other among the best. The dilator is sometimes introduced as soon as the operation is finished, especially if there be much hæmorrhage, which always ceases immediately in consequence of the pressure of the instrument. But most generally I do not order it for twenty-four hours after the operation, when it is worn two, three, or four hours. Its introduction is attended with a sense of soreness, but with none of the peculiar, agonizing suffering, characteristic of the original disease. The instrument is usually worn for two hours in the morning, and two or three hours in the evening, more or less, according to the tolerance of the patient. I have been often astonished at the rapidity with which the cuts heal, the process being seemingly facilitated by the pressure of the glass dilator, which is to be worn daily for two or three hours, or until the parts being entirely cured, and all sensitiveness removed, the patient may be pronounced competent to fulfil comfortably and pleasantly the duty of a wife.

The dilator is about three inches long, sometimes a little more, slightly conical, open at one end and closed at the other, and of different sizes, varying from an inch to an inch and a half in diameter. At the largest part near the outer extremity, there is a depression on one side for the urethra and neck of the bladder. It is open at the outer end to allow the pressure of the atmosphere to hold it in the vagina, which it does very effectively. When closed at both ends, a T bandage is necessary, and the instrument often slips. I found that a perfectly round cylinder, on being worn for three or four hours, always irritated the urethra and neck of the bladder; hence, the urethral depression on one side, which also materially aids its self-retaining power.

This disease is by no means rare. Dr. Emmet and myself saw seventeen cases in twenty-four months. Of these, one had been married thirty years; one, fifteen years; one, thirteen years; one, seven years; one, six years; three, three years; and so on down to two years. Of these, fifteen have been treated, all of whom were cured. Three have become mothers—one conceiving in two months after her cure, one in four months, and another in twenty months—and I have no doubt that many more will become mothers in due course of time. In most of them, sexual intercourse had never been accomplished; in two, it had been done a few times very imperfectly, then suspended altogether; while in two others it had been indulged in under the most trying circumstances, and always with dreadful suffering to the wife, and in these there was the most complete wreck of the nerves, if such an expression may be allowed. All were married but one. In this case, the affection was not discovered until her physician made an effort to find out something about the state of her womb, as she was suffering greatly from dysmenorrhœa. He then sent her to me, supposing that she had atresia vaginæ. The vaginismus was cured in two or three weeks, after which the patient returned to her physician for treatment of her dysmenorrhœa.

It must not be for a moment supposed that I arrogate to myself the discovery or description of a new disease. I do not, for it has been encountered for all time. I claim only to have separated Vaginismus from a great class in which it had been obscurely hidden away. Others have met it before. Some have called it neurosis; but this is a generic term, which may be applied to any painful affection, uncomplicated with inflammation. Many have called it neuralgia; but this term is wholly inapplicable, for it has none of its habitudes. Neuralgia is supposed to be a painful affection usually in the course of a nerve, coming when it pleases, remaining as long as it pleases, and disappearing when it pleases, but usually observing a particular cycle of time in its advent, its culmination, and its decline. Let it once leave, and it cannot be recalled at will; but vaginismus can be provoked at any moment by the gentlest touch, ceasing immediately on removing the irritating cause, never returning spontaneously, and never returning at all except under the same mechanical agency. Time will show that this is not the only disease where our ignorance is covered over by the broad mantle of neuralgia. Some have called it hyperæsthesia, but this is only another phase of neuralgia—a thing that is here to-day and gone to-morrow, and is most generally symptomatic of some other affection. I call it Vaginismus, because it is not only a symptom but a conglomeration of symptoms, constituting a distinct and separate disease, with as good a right to a proper name as any disease enumerated in our nosology.

If, by the invariable uniformity of symptoms, if by the frightful amount of physical, moral, and social suffering which it always engenders, or, better still, if, by the certainty, facility, and safety of its treatment, a disease be entitled to a particular name and special study, then must Vaginismus be hereafter recognised whenever seen, and cured whenever treated.

Mr. Wakley, editor of the *London Lancet*, receives a salary of $9000 per annum, as Coroner for the county of Middlesex.

FRACTURE WITH DEPRESSION OF THE SKULL

OF SEVEN YEARS' STANDING, RESULTING IN LOSS OF MEMORY AND EPILEPTIC FITS.

By E. S. COOPER, A.M., M.D.,

PROFESSOR OF ANATOMY AND SURGERY IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE PACIFIC, SAN FRANCISCO.

Notes of the following case were published in the *Medical Press* shortly after the operation. I now give it in detail.

Case.—Capt. J. G., æt. 41, was admitted, March 28, 1861, in consequence of fracture of the skull with depression.

There was depression at three different places on the front part of the skull. One very slight almost directly over the anterior superior sinus where the sagittal suture is crossed by the coronal. Another and much deeper depression was about three quarters of an inch to the left of the first. The third was one and a half inches back, and half an inch to the right of the last.

The first of the two last was very tender to the touch, and the patient evinced or complained of pain at once when pressure was made upon the part.

Condition of the Patient.—The mental faculties were nearly destroyed, the patient forgetting his age and the name of the vessel of which he was for many years master. The right arm and leg were in a state of partial paralysis. The face was sallow, and countenance idiotic, though the patient was represented to have been very bright in former years. Breathing somewhat difficult, and all the energies of both body and mind were overcome. The appetite was good, and the functions of the organs generally well performed.

Operation.—The scalp being shaved over the deepest of the three depressions, and the one tender to the touch, a crucial incision two inches long was made down to the bone. Cutting through the scalp caused quite an active and persistent hæmorrhage considering the parts involved. When the bleeding had subsided the trephine was used, and a piece of bone three-fourths of an inch in diameter removed.

The patient then became much more rational, called his friends by name, and recollected his own age, which he had been unable to do for a long time previously. This was the more surprising, since the inner surface of the bone removed was not found depressed. What appeared to be depression prior to the operation proved to be nothing more than absorption of the external surface of the bone, and thinning of the scalp at that point. The bone was not more than one-third of its usual thickness. This speedy improvement did not stop here. In three or four days he had recovered to a great extent the use of the arm and leg, and his speech and mental faculties were so much improved as to be readily noticed by all his friends.

During the night of the seventh day after the operation, secondary hæmorrhage occurred from the scalp, and was arrested with much difficulty, although no vessel of any size had been wounded. The coagulating principle of the blood being apparently lost, frequent bleedings occurred after this, until the patient became very weak, when it was found necessary to carry stitches through the bleeding surface until it was entirely whip-stitched.

The hæmorrhage was finally arrested, but as soon as that was effected the old symptoms returned. So long, however, as the bleeding lasted the patient continued improving. But in one week after the hæmorrhage ceased a decided change for the worse was perceptible, and the condition became more and more manifest, until the patient became, at the end of seven weeks after the operation, much worse than he was previously. The affected arm and leg became almost powerless, and his apoplexy returned. All his mental faculties were lost or nearly so, until his case became quite hopeless. He was consequently sent away, but died in his bed alone during the first night after his departure.

The question now arises, and with it the principal feature of interest belonging to the case:—What was the cause of the great but temporary improvement after the operation? Was it the removal of a piece of bone which was not depressed in a perceptible degree, or was it the loss of blood? It appears that it must have been the latter. If that were the case, and I do believe it was, it affords some evidence in favor of the plan of Dr. Rush, viz. to bleed patients laboring under epilepsy just as much as they could possibly bear, without risk of dangerous prostration.

Reports of Hospitals.

BELLEVUE HOSPITAL.

A CASE OF HYDROPHOBIA.

(Reported by Henry S. Plympton, M.D.)

SERVICE OF DR. CLARK.

Thomas O'Hare, æt. 34, a native of Ireland, was admitted about half past twelve P.M., May 11th. The history which he gave of himself was this:—Two weeks before, while cleaning a stable, he was bitten on the hand by a dog supposed by him to be rabid. The dog did not froth at the mouth, but was cross and restless. The animal was killed immediately. The wound healed rapidly and perfectly. Three days before admission to the hospital he went home somewhat intoxicated, and feeling thirsty asked for water, which, on being brought to him, he found himself unable to drink, and at the same time he was seized with severe rigors. These symptoms terrified him exceedingly, as he had been in constant fear of hydrophobia since he was bitten. The shiverings recurred several times during the night. He did not froth at the mouth, nor attempt to bite any one, but was taken care of by three women until the middle of the second night, when his agitation markedly increased. He could drink water if his hands were held. Some policemen were then called, who took as much care of him as was consistent with their great fear of being bitten. The patient did not sleep nor eat for forty-eight hours before entering the hospital.

When admitted, he was perfectly rational, but in a state of the most intense fear. He professed that he had no desire to injure any one, nor had he even thought of it before. His weakness seemed very great, and he was in great fear that the sputa which he coughed up would choke him. He also experienced a sense of constriction in the fauces. There was a slight twitching of muscles; the face and eyes were suffused; pupils alternately dilated and contracted; anxious expression; tongue and throat congested, but moist, and covered with a small amount of tenacious sputa; vomited a thin greenish fluid, the effects of an emetic taken outside the hospital; respiration at times spasmodic; pulse varying from 112 to 116. Urine passed freely and in normal amount. A cathartic and an enema were given. At 6 P.M. the pulse was 98, and somewhat less irritable. One-fourth of a grain of morphine in solution was given every two hours, with large enemata of assafœtida. He took the solution without difficulty when assured that it was not water. The morphine had no effect. Four enemata were given, the last one, which was administered at half past one, being the only one retained. At that time he answered the night watch, and did not appear to be much worse. Ten minutes afterwards the watch, hearing a noise, went to him, and found him gasping and turning blue. In five minutes he was dead. The head was thrown back, and the face was almost black. The orderly said that previous to death his breathing was full and deep, with long intervals between inspiration and expiration. Unfortunately for pathology, a post-mortem examination was positively denied by the presumptuous coroner who had the body in charge.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, April 23, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

CANCEROUS DISEASE OF INTESTINES.

Dr. Griscom presented a specimen of cancerous tumor of the abdomen, weighing thirteen pounds and four ounces, with the following history :—

James W. Parkinson, æt. 47, England. Widower. Admitted April 7, 1862. (Dr. Griscom, Attending Physician.)

History.—Seven years ago had intermittent fever for the first time; during the paroxysm was frequently more or less delirious. For four years had three or four attacks every season. During the past three years has had an occasional light attack. Has had hæmaturia three or four times within the past two years, each attack lasting a week or so. About three years ago he first noticed a swelling in the left hypochondriac region. This has been increasing gradually ever since. Patient was seen two years ago by Dr. Griscom, who then recognised a tumor occupying the position that an enlarged spleen might, which, from the man's previous history, gave rise to that opinion. From that time forward the tumor did not appear to increase much in size. About a year ago, patient remarked a distinct swelling in the left iliac region, which gradually enlarged up to the present time. Patient has never had much pain or soreness about the abdomen. Bowels very constipated for several years; has taken injections constantly for the past year.

On admission, patient is very feeble, face and lips pale, everything indicating an exsanguinated condition; tongue furred; pulse 80; appetite very poor; vomits after eating.

Autopsy.—Lungs, heart, kidneys, bladder, healthy; spleen weighed eight ounces, appearance natural; liver healthy; tumor weighed thirteen pounds, four ounces.

CARCINOMATOUS DEGENERATION OF CARDIAC ORIFICE.

Dr. Flint exhibited a carcinomatous stomach removed from a patient æt. 45, who was admitted into the Blackwell's Island Hospital in a state of great exhaustion, and evidently very near death. The statement was that he had been unable to digest anything but liquids for a very long time. Whatever else he swallowed was immediately returned. There was also constipation of the bowels, and it was said that no dejection had occurred for a month. Death took place within twenty-four hours after admission.

On post-mortem examination, the cardiac orifice, for a circular space about three inches in diameter, was found to be the seat of cancerous degeneration; the walls were thickened, and at some points the mucous membrane was destroyed. The disease extended somewhat up the œsophagus. The cardiac orifice was so completely occluded, that water could be held in the œsophagus. There was some deposit noticed at the pyloric orifice. A specimen taken from the cardia had been examined by Prof. Flint Jr., and presented the yellow elastic fibre in abundance, pus corpuscles, granular debris, and cancer cells.

OCCLUSION OF THE INTESTINE, ETC.

Dr. Krackowizer presented a specimen of occlusion of the intestine, for which he was indebted to Dr. Schweig, in whose practice the case occurred.

The child was born March 16th, at six A.M., and died April 21st, about midnight, living five weeks and eighteen hours with complete occlusion of the gut. I had occasion to see the child with the Doctor on the second day. On the first day it was not noticed that there was any defect, but the child not passing any meconium attracted the attention of the parents, and Dr. Schweig was accordingly sent for. He examined the child, and found a well formed anus and rectum, and could introduce the finger as high up as the promontory of the sacrum. By a gum elastic catheter he could reach up a distance of six inches, the instrument then being turned a little to the right and arrested. The mother stated that the child had once or twice passed a whitish-grey substance from the anal orifice, and on the second day had evacuated matter which was evidently meconium. The examination which I had made corroborated what the Doctor had found. It was supposed that there was occlusion of the gut about the sigmoid flexure, and the operation for artificial anus was accordingly proposed, but the parents declined having anything done. The child was the younger of twins, well formed, and when born was twenty-one inches long, and on the second day took the breast with avidity. After it was determined that no operation should be performed, the mother concluded that it was best to give the other child the full benefit of the breast, and feed this child on milk and fennel tea. It did remarkably well, and would take the milk and tea with a relish. The secretion of urine seemed to be normal. At the end of every second day it would become restless and would cease to take the food with eagerness, and on the fourth day it would refuse it altogether and would then vomit fæcal matter. In this condition the little patient lived for three weeks: every fourth day voiding the contents of the bowels by the mouth. About the middle of the third week it was taken with sprue, but recovered from that. The skin kept always pleasant and soft, the voice was strong and loud, and the slightest touch disturbing him, would be answered by good strong motions of the whole body. When the child had vomited, the abdomen always resumed its normal shape, which gave me the idea that the obstruction was above the ileo-cæcal valve. After this vomiting had occurred, the abdomen would gradually swell up again. But from the commencement of the third week, however, the abdomen did not recede after vomiting, and at the commencement of the fourth week the loops of the intestines could be seen in large masses through the very thin integuments. The child on the fifth week became very feeble, and died on the 21st instant.

On making the post-mortem examination and opening the very thin abdominal walls and turning them back, no peritonitis was found. The loops of the small intestine were seen dilated to a great size, filling the whole abdominal cavity. In the right iliac region was found a process about the size of small packing-thread rolled in spiral loops, and this proved to be that portion of the intestine below the occlusion. It was distant about a foot from the cæcum coli. The large intestine rose in its natural form, and though small, ended in a natural anus. The mesenteric glands belonging to that part of the intestinal canal which is pervious were well developed, while there was no trace of glands below the occlusion. In this case, if an artificial anus had been made, a loop of intestine would have been selected not very far below the duodenum, and the mucous surface would have been very small for the absorption of nutritive substances. The child took no food whatever for the last few days of his life. The occlusion of the gut was entire, and doubtless originated in intra-uterine peritonitis, as was shown by the presence of a small membrane passing from the mesentery of the pervious bowel to the ascending colon.

Dr. Post remarked that the intestinal canal had been known to have been occluded at almost every point in its course.

Dr. Parker had never seen a case of occlusion of the intestine below the ilio-cæcal valve which did not terminate fatally before the fourth or fifth day.

Dr. Griscom had a case of occlusion of the rectum where the finger was passed into the gut to the extent of about an inch before encountering any obstacle. A perforation was made through the membrane and the child lived three months, but it was necessary to perform the operation every day in order that a passage might be obtained.

FIBRO-CYSTIC TUMOR OF UTERUS.

Dr. Krackowizer presented a specimen of fibro-cystic

tumor of the uterus, and accompanied it with the following verbal history:—

The woman from whom this specimen was taken was a native of France, who came to this country pretty early. She was married here, and had three children and two miscarriages. Her youngest is 13 years old. She was always in good health until about nine years ago, when a swelling commenced forming in the left side of the abdomen, accompanied with painful sensations. She supposed herself pregnant, but not feeling exactly as she used to do in that condition, she consulted her physician. He at first thought her pregnant, but very soon afterwards altered his opinion, and told her that it was a tumor of the left side connected with the ovary. Different kinds of treatment were resorted to, rational as well as empirical, but without any result. About the second or third year from the commencement of this swelling, she was subjected to the application of electricity by some empiric. After this she always complained of more or less pain in her right side. Her health was otherwise good, though she was impeded, as the tumor grew larger, in her wonted avocation. She would have, about once a year, a spell of two or three days, when there would be a good deal of pain in the abdomen at the seat of the swelling, the tumor would then take a pretty rapid rise, soon after subsiding to its otherwise habitual slow growth. She went, three years ago, to Paris, and submitted herself to the care of Dr. Avél. She was by him put under a course of iodine, internally and externally, but without avail. She then came under the care of Dr. Mechait. Drs. Avél and Mechait both made repeated tappings of the tumor, I believe to the number of forty in the course of one year. It was remarkable that not only very little fluid could be drawn off at the time of the tapping, but that from the canula remaining in the wound, there would be an oozing which would continue for days. She would always notice that before a tapping would again become necessary, the function of the kidney was very much interfered with, and that whenever the tumor diminished in size by tapping, the secretion of the organs would be very much increased, so much so, indeed, that 32 or 24 litres would be passed in 24 hours. This gave rise to the supposition that probably some communication existed between the kidney on one hand and the tumor on the other. The urine was accordingly examined, but was found to be urine and nothing else. Once or twice an injection of iodine was made into the tumor, but the symptoms that were produced were so alarming that it was not tried a third time. About spring of last year the tumor was so much reduced by systematic tapping that, imagining herself almost cured, she began to make arrangements to return home to her husband in Newark. She, however, was accidentally delayed for some time, when the fluid commenced to re-accumulate. She consulted Robert and Maisonneuve. They did not give her any encouragement in reference to a cure, and refused to accede to her wishes to have the tumor removed. She then quitted Paris and came to this country, with the determination to have the operation performed. She arrived here in February. Her health was pretty good, her digestion excellent, her bowels regular, and she was generally well nourished; the only thing, however, that she was distressed about was the difficulty which she experienced in moving about, owing to the size of the tumor. I found that the circumference of the abdomen was about 62 inches, and that the distance from the ensiform cartilage to the symphysis pubis was about 30 inches. The tumor was pretty round in shape. It gave pretty distinct fluctuation, less towards the right side. I stated to her what she might expect from the palliative treatment, and also from the radical treatment. While she did not object to the performance of the operation, she desired to try the former treatment first. So I tapped four or five times. The largest quantity of thick, clear liquid I obtained at any one time was a pint and a half. The oozing afterwards was very insignificant, the secretions of the kidney were increased, but the tumor did not diminish perceptibly in size from the tapping. A consultation was held, and it was stated to her what she might reasonably expect from the performance of the radical operation. She consented to have the tumor removed, which was done about the 10th of April.

During the whole time of her illness I may remark that menstruation was regular, the last period occurring about the 2d of April.

She was put under chloroform, and the anæsthesia was continued with ether. An incision was made four inches in length, equally distant from the umbilicus and symphysis pubis. The walls of the abdomen were very thick, being about one and a half inches. After the peritoneum had been opened into, the hand was introduced and some slight adhesions to the right were broken up, also a pretty firm band in the neighborhood of the umbilicus. The woman about this time in a measure recovered her sensibility, and I was surprised at the force with which the abdominal muscles acted on my hand, which was placed between them and the surface of the tumor. My hand was held as firmly as it has been by the uterus in its most violent contractions. After the anæsthetic condition was again established, the incision was enlarged one inch more above, and the hand could now sweep over the whole tumor up to the ribs. About two inches of adhesion were broken up near the false ribs on the right side. On the left side, the adhesions were very slight, and behind they were entirely absent. The anterior aspect of the cyst wall was then ruptured, when a gush of serous fluid followed. It was then thought best, before the cyst collapsed, to puncture it and give the contents exit. A very large trocar was thrust in, but there was only a very little oozing of serum. The cyst wall was then cut through and laid open to a very large extent, when it was found to be occupied entirely by a jelly-like substance having an appearance and arrangement exactly resembling that of the vitreous humor of the eye. The meshes were filled with a liquid, which, however, did not escape until the tissue was crushed and squeezed in the hand like a sponge. The fluid which escaped was of the color of scrum, mixed with blood from torn vessels in the structure. After this jelly-like substance had been crushed into membranous shreds, it was found that the large cyst, which contained four or five gallons, rested on another tumor on the left side, and it was necessary, to remove that, to enlarge the original incision two inches, making it now seven inches. The cyst was then lifted out, when it was found to be connected by a firm, strong pedicle an inch and a quarter in diameter, cylindrical in shape, not to the ovary, but to the *fundus uteri*. The pedicle was three inches long, and was very near the cyst wall. The clamp was applied, but, just as the last turn was being made, it broke. A strong double ligature was then passed through and tied on both sides. It was found that the right ovary contained two or three Graafian vesicles enlarged to the size of small peas, which were ruptured; the left ovary was healthy, the right Fallopian tube was normal, the left one was diseased, its free end being gathered up and connected by old and strong adhesions with the ovary and lateral ligament. It was somewhat enlarged by the accumulation of its secretion. The bleeding was considerable. After the tumor was lifted out from the abdomen, there was quite a gush of liquid blood with coagula, which it took some time to absorb by sponges. One vessel was tied in the broad ligament, and it was also found necessary to tie one adhesion and part of the membrane which made adhesions to the cyst wall. The great thickness of the abdominal walls made it impossible to use the hare-lip suture, and I had to take a pin five inches long to secure the pedicle so as to bring its wounded surface in the track of the abdominal wound. I took a broken trocar, and carrying through the walls and pedicle, I fixed it as we do hare-lip pins. Three silver sutures were carried through the remaining portion of the wound, taking up the peritoneum, and the wound was closed.

The woman was very feeble and cold after the operation. She was given at once 30 drops of Squibb's Liquor Opii

Compositus. She revived soon after, but complained of a sensation of cold. Before putting her to bed, the immense abdominal walls collapsed, forming a hollow which was filled with large towels dipped first into cold water, and secured in situ by means of adhesive straps passed around the body. I saw her a couple of hours after, when she complained only of thirst. Her pulse was feeble and irregular. Ten drops of Squibb's liquor of opium were given every hour, and milk punch *ad libitum*, with small pieces of ice. She never, for the next thirty-six hours, complained of the least pain in the abdomen. She had not vomited. She was kept in a very easy condition by means of narcotics. She would doze away occasionally, but as anybody approached her bed she would open her eyes, express her satisfaction at the completion of the operation, and would speak about going to Paris soon, and telling the French surgeons what could be done. The only unpleasant symptom to me was, that although the pulse came up, yet the skin did not have that fine healthy feel; when the hands were exposed a little, they would become covered with a clammy sweat. I had occasion to use the catheter but once. At the end of thirty-six hours after the operation, I found that her epigastric region was swollen, but not painful or tense. On the second night after the operation, about two A.M., she commenced vomiting, and this continued until six in the evening, when she died, being conscious all the time. The matters vomited consisted first of watery fluid mixed with mucus, and later resembled mixed coffee-grounds. She died from pure exhaustion.

The post-mortem examination was made seventeen hours after death. The wound of the abdomen where the pedicle was lying was somewhat discolored; so also was the wounded surface of the pedicle. The rest of the wound, as far as the peritoneum was concerned, had already made a very good union. The peritoneal covering of the uterus and appendages showed traces of moderate inflammation, but there was no trace of general inflammation of the peritoneum. The stomach was swelled up to an immense size, and contained the same substance which had been thrown up during the later period of her life. The uterus, as here shown, is seen to be elongated and hypertrophied. It will be seen that the uterine substance passes into the pedicle up to the distance of about an inch and a quarter, when the place of normal uterine structure is taken by a harder substance. The pedicle is permeated by veins of immense size.

This pedicle, then, corresponds to the base of this tumor, and it seems that the uterine substance travels up along the cyst and encircles the very substance of the basis of the cyst. From the pedicle then a large hard knotty mass forms, which branches off into three directions; then this forming alveoli is gradually transformed into this shreddy material filling the entire cyst. The uterus contains besides a small fibroid tumor in its walls. I have never heard that tumors of this kind originate from the uterus, and I have spoken to many gentlemen, and they don't remember ever having heard of a similar case. I think from what I have seen by microscopical examination, that the tumor is not malignant. This hard mass is mainly composed of fibro-plastic cells in great numbers, interlaced and running into bundles and fascicles. These are interspersed with small nuclei. I could not see any free cells. I think the tumor was originally fibrous in character, and that it subsequently became transformed into this cellular material.

In answer to a question from Dr. Peaslee, Dr. K. stated that he was inclined to attribute the vomiting more to the quantity of opium used (3ij. of Squibb's liquor opii in thirty-six hours), than to uterine irritation. He thought, in another operation of the sort, he would wait until the inflammation should establish itself to a degree to render the administration of opium admissible, rather than anticipate the inflammation. He had noticed that the English surgeons, who have had great success in ovariotomy, use opium very sparingly.

Dr. Peaslee thought that the vomiting was due to the irritation of the uterus caused by the application of the clamp.

Dr. Hinton, in this connexion, referred to the case of a lady who for a long time suffered from neuralgia of the uterus, attended with vomiting, which would generally come on about the middle of the night. When the neuralgia disappeared, the vomiting entirely ceased. He thought this was a very marked case, showing the great sympathy which exists between the stomach and uterus.

American Medical Times.

SATURDAY, JUNE 7, 1862.

RED-TAPE.

Every one who has been brought in contact with any department of Government (and who in these times has not?), has been struck with the intricate maze in which every matter of business is enveloped. The simplest inquiry, which in any business corporation would be dispatched in a moment, and the required information immediately obtained, on the part of Government officials involves such an amount of detail, such endless delay and annoyance, that in nine cases out of ten the golden opportunity for using it is lost when it is finally furnished, if the applicant has the patience to persevere in his search. This official routine is called "Red-Tape." During the war of the Crimea, so disastrous to the cause of the Allies did official routine become, that it was designated "Blood-Red-Tape." Are we not to-day suffering under a reign of Blood-Red-Tape?

We are engaged in a war the most gigantic in its proportions which the world ever saw. In its results it is to be the most important in history, whether we regard its political, social, or medical bearings. The half million soldiery now engaged in upholding the cause of Constitutional Government are drawn from the free, intelligent people; they are our friends, our neighbors, our relatives. At what sacrifice of the comforts of domestic life, of health, and of business, they have patriotically answered their country's call for aid, and gone forth to meet dangers, sickness, and probable death, no historian will ever record.

For this army of citizen soldiery the country feels the liveliest sympathy, and takes every opportunity to make it manifest by substantial aid. In every locality throughout the Northern and Western States, voluntary organizations exist for supplying all the necessaries for the comfort and protection of the soldier on duty, and hospital supplies for those confined to hospitals. With characteristic enthusiasm our people lavish their bounties upon every organization which promises to supply the suffering with their charitable offerings. From the Sanitary Commission, which distributes the generous contributions of our citizens on a liberal scale in all the camps and hospitals of our widely extended army, to the most limited village society, the most commendable activity prevails among the people in supplying the wants of our citizen soldiers. They fill every hospital to which they have access with the most substantial foods and drinks; they have but to learn the wants of any class or condition of soldiers, and the supply is imme-

diate, and, of course, always timely. No one can fully appreciate the value of the voluntary associations of the country for the relief of sick soldiers, and especially the great central organization, the Sanitary Commission, who has not walked through the wards of a military hospital, and listened to the feeble protestation of the sick against stale bread and sour molasses as a diet, and had the privilege of supplying promptly, butter, jellies, wines, etc., etc., fresh from the country, without the formality of official routine. Many of the dark and repulsive phases of war are relieved by the spontaneous outgushing of a people's sympathy for their noble defenders. War is thus knitting heart to heart, state to state, section to section, in closer, holier, and more lasting bonds.

But when we pass from the free, spontaneous activity of our voluntary organizations to the sphere of official duties, we pass, as it were, from the tropical to the polar regions. All is now formality and frigidity. If there is a heart to feel, the features are stiffened, and cannot relax with sympathy; the hand is paralysed, and can give no aid. The power to relieve human suffering, sorrow, and death, are idle incentives to exertion. The official moves in a circle, his feet bound, and his eyes blindfolded. He seems deaf to all entreaties, and insensible to every appeal. He sees nothing, hears nothing, knows nothing beyond the limits of the official seat on which he has grown callous by long and undisturbed sitting. Red tape, official routine, dull and insensible formalism, are the curse of our Government, and but for the generous activity of voluntary societies, would be the ruin of our armies. From every quarter we hear the same universal complaint of want of preparation, of tardiness to meet the exigencies of battles, and, in consequence, of the sacrifice of human life, with a vast amount of needless suffering. The horrors of the battle-fields of Bull Run, Fort Donaldson, Pittsburgh Landing, Williamsburgh, etc., can never be written, and yet all occurred under circumstances which allowed of more or less complete preparation. The battle of Bull Run took place under the immediate inspection of the official head of the Medical Bureau; it was planned weeks beforehand, and admitted the most ample medical provision; yet the nation has not and never will cease to thrill with horror at the mention of its name, and the recollections of the terrible sufferings which followed the disaster. At Fort Donaldson the poor sufferers remained for days uncared for, lying on the snow; not because succor was not at hand, for private bounty had furnished an ample supply and freely offered it; but because an official, rejoicing in the glittering bauble "U. S.," could not unwind the red-tape which bound his official legs, in forty-eight to sixty hours. Pittsburgh Landing found the same army utterly unprepared in its medical department for battle, and the first assistance that reached the sufferers came from Chicago, hundreds of miles distant, by private hands, after the news of the battle was received. Here was exhibited "blood-red-tape" in its brightest colors. Tardiness and tedious formality marked every movement for days, while hundreds of wounded were weltering in their blood, unable to move a step from the spot where they fell. The recent battle of Williamsburgh was but a repetition of the same scenes, with all their sad and harrowing consequences. The wounded were left unprovided with attendants, shelter, or means of transportation, except of the rudest character. The principal provisions for the immediate care of the sick and wounded were, as in nearly every instance, made by the Sanitary Commission or charitable associations.

In our military hospitals we find the same want of earnest and systematic labor. The sick and wounded are waiting at the threshold before the building is in readiness to receive them, though the emergency was long foretold; many of the hospitals are poorly provided with the necessary stores, though there is an abundance bound up in red-tape, near at hand. The removal of convalescents to distant localities is attended with the same delays, disappointments, and often repeated failures. The difficulties attending transportation often seem insurmountable, so circuitous is the channel through which the proper authority makes known its behests.

We recur to these facts with sorrow and shame. The genius of our Government should make its official acts as free and prompt as are the sympathies of the people. War has its exigencies, and one of the most notable will be, we trust, the rejuvenation of every Department of Government. Already has it purged the Medical Bureau of much of its dulness, and energized its decrepid members with younger blood and a more elastic spirit. This work of reform should not cease until every department is purified, and energy and efficiency supplant dulness and stupidity.

THE WEEK.

The dangers of conflagration from the storage of inflammable oils within the city limits were last week suddenly demonstrated on a large and most destructive scale. In this accident we see the value of a Metropolitan Board of Health controlling such sources of destruction of human life and property in the adjacent cities, and their waters. An evening paper gives the following account of the fire, with some very practical suggestions:—

"If the wind had been westerly yesterday the greater part of Williamsburgh would probably have been destroyed, and this through the carelessness of some person while handling petroleum, which was unloading from a lighter alongside a dock on which a great quantity of the same exceedingly combustible oil was stored. A cask fell and broke open; the gases arising from the spilled oil caught fire, as is reported, from a lighted cigar in the mouth of a laborer on the vessel, and in an instant the lighter was in flames. As the flames reached the remainder of her cargo, barrel after barrel exploded, increasing the fierceness of the flames, which presently caught on the dock and spread destruction all around.

"Fortunately this happened on the waterside. But there are in the heart of the business part of New York numbers of buildings in which these extremely combustible oils are stored. We could point out a single block which contains not less than five or six such depots of petroleum and kerosene, and this in one of the most crowded business centres. Suppose such an accident should happen in one of these warehouses. It may occur at any time; for the very walls and floors, even the pavements outside the buildings, glisten with the spirit-oil, and the slightest touch of flame in a favorable spot would kindle a fire which might lay in ashes property to the amount of millions.

"We have no doubt that the proprietors of these warehouses use great care to prevent such accidents. They would do this for their own interest. But they ought not to be permitted to store any such hazardous substance within the city limits. They should be forced to keep their depots without the city, and let those who retail these oils bring in their daily supplies, under proper restrictions, and on condition of keeping these in depots constructed for the purpose. It is not permitted to store gunpowder in the

city limits; but these coal and earth oils are almost as formidable as powder. The subtle gas which comes from them, carburet of hydrogen, when mixed with a volume of oxygen, or of atmospheric air, will explode like gunpowder on contact with fire. It does not need a flame to kindle it. We hope to see our city authorities take such action in this matter as will at once relieve our business community from a peril which grows every day greater, from the rapid increase in the rock oil and kerosene business.

—

By an Ordinance introduced into the Common Council of this city, a new hospital for sick soldiers is to be established by the city, adding another and most important charity to the large number already devoted to the disabled volunteers. The committee of the Common Council to whom the subject was referred, have reported favorably on accepting the building in the Central Park, known as the "Academy of Mt. St. Vincent," which has been tendered to the city by the Central Park Commissioners. This building was formerly in charge of the Sisters of Charity, and "is beautifully situated on the high, bluffy land overlooking Harlem, and the villages on Long Island and Westchester county, together with the islands on the East River, the Palisades on the Hudson, and the beautiful and varied landscape of the Central Park; it is large, commodious and airy, well ventilated, and affording accommodations for at least six hundred patients; it is surrounded by beautiful grounds, embracing some five or six acres of the most beautiful portion of the Central Park; it is easy of access, while sufficiently removed by distance from the annoyance arising from the idle curiosity of passers-by." The general charge of the affairs of the Institution will be confided to the Sisters of Charity. The following is the proposed list of Medical officers:—

Consulting Surgeons.—Valentine Mott, M.D.; Alex. H. Stevens, M.D.; Willard Parker, M.D.; Gurdon Buck, M.D.; Alfred C. Post, M.D.; James R. Wood, M.D.; Wm. H. Van Buren, M.D.; Thomas M. Markoe, M.D.; William Detmold, M.D.; Alonzo Clark, M.D.; Joseph M. Smith, M.D.; Isaac Wood, M.D.; John T. Metcalfe, M.D.; Henry D. Bulkley, M.D.; Edmund R. Peaslee, M.D.; James O'Rorke, M.D.; Charles Henschel, M.D.; James Anderson, M.D.

Attending Surgeons.—John J. Crane, M.D.; Henry B. Sands, M.D.; Thomas C. Finnell, M.D.; G. F. Woodward, M.D.; E. Krackowizer, M.D.; J. K. Merritt, M.D.; J. S. Thebaud, M.D.

Attending Physicians.—Wm. H. Draper, M.D.; Abraham Jacobi, M.D.; George B. Swift, M.D.; Elsworth Eliot, M.D.; F. N. Otis, M.D.; E. B. Beldan, M.D.; Mark Blumenthal, M.D.

Resident Physician and Surgeon.—J. J. Connolly, M.D.

—

By the recent Act of Congress there is to be appointed a number of Medical Storekeepers. The Adjutant-General has issued the following General Order in relation to their appointment:—

"The following are the regulations which will govern the appointment of Medical Storekeepers under the first section of the foregoing Act of Congress:—

"*First:* A Board of not less than three medical officers will be assembled by the Secretary of War, to examine such applicants as may by him be authorized to appear before it.

"*Second:* Candidates, to be eligible to examination, shall not be less than 25 years or more than 40 years of age, shall possess physical ability to perform their duties satisfactorily, and shall present with their applications satisfactory evidence of good moral character.

"*Third:* Candidates will be required to pass a satisfactory examination in the ordinary branches of a good English education, in pharmacy and materia medica, and to give proof that they possess the requisite business qualifications for the position.

"*Fourth:* The Board will report to the Secretary of War the relative merits of the candidates examined, and they will receive appointments accordingly.

"*Fifth:* When appointed, each Medical Storekeeper will be required to give a bond in the amount of $40,000 before he shall be allowed to enter on the performance of his duties."

—

The members of the Chicago Sanitary Commission, Prof. Isham and Mr. Patton, who visited Pittsburgh Landing with hospital supplies, speak in the following complimentary terms of Dr. Henry S. Hewitt, Medical Director, who, it will be remembered, was suspended from duty, on account of charges preferred against him:—

"We met also Dr. Hewitt, the Medical Director of Gen. Grant's forces. Though, since our mission, he has been suspended, to allow inquiry into the charges preferred against him upon previous matters by parties at Cincinnati, concerning which we have no knowledge, and express no opinion, we must do him the justice to say, that in thoroughness of professional knowledge and plans for the army, he is one of the ablest surgeons whom we have met in the service, and has uniformly treated us with perfect courtesy, and co-operated willingly and actively in our measures. And inasmuch as many have attributed to his incompetence or neglect, the destitution of medical and hospital supplies after the battle, we would barely state three facts:—1. Dr. H. made application, in vain (we have seen and read the official answer), nearly a month before the battle, for a supply adequate to such an emergency. 2. On the Sunday after the battle, the regimental hospital supplies on hand were plundered by the enemy, when the camps were taken. 3. General Buell's army, in its haste, left its supplies behind. Hence there was no possible way of caring for 3,000 to 5,000 wounded men, unexpectedly thrown upon the hands of the surgeons. Even rags and bandages were wanting, except as we supplied them, and new sheets were torn up by the surgeons for such use, while we turned over to the medical purveyor a large part of our stock of chloroform, his own being entirely exhausted!"

—

We have alluded to the prospectus of the "Medical Register of the City of New York for 1862," prepared by Dr. Geo. H. Tucker; the work is now issued, and fully sustains the recommendation which we then made. It embraces all the local statistics of the profession for the past year, connected with our societies, colleges, and public institutions, with a large variety of other useful information. This work is very much needed, and its inception, as well as execution, reflect honor on its author. It deserves such liberal support of the profession as will enable the compiler another year to add largely the scattered materials of the history of medicine in New York.

—

Losses in the Medical Department of Gen. Banks' Army.—The loss in medical men was large. Dr. Mitchell, First Maryland, wounded and captured at Front Royal; Dr. Gillespie, Twenty second Indiana, left at Strasburg; Dr. Porter, Assist. Surgeon U.S.A., left at Strasburg; Dr. Leland, 2d Massachusetts, captured on the field at Winchester; Dr. Johnston, Fourteenth Indiana, captured on the field at Winchester; Dr. Adolphus, Best's regular battery, remained to take care of sick captured in ambulance; Dr. Bissell, Assistant Surgeon, Fifth Connecticut, captured; Dr. Stone, Assistant Surgeon, Second Massachusetts, captured at hospital in Winchester.

Reviews.

Essai d'une Bibliographie Universelle de la Medecine, de la Chirurgie, et de la Pharmacie Militaire. Part I. Victor Rozier, Editeur. Paris. 1862.

This interesting volume, which the medical public owe to the indefatigable industry of M. Rozier, will, we are sure, recommend itself to the profession as one of a special character. No similar compilation, we believe, exists in any language, and probably no other person could have been selected better fitted for the task than the accomplished gentleman who has edited it. Some idea of the importance of the science of Military Medicine may be inferred from the fact that the list of works mentioned in this *first* part reaches the high number of 4,424! Many of these works are of course out of print; but of most of them M. Rozier can furnish *one* copy at least. We have personally examined his stock, also that of other Parisian booksellers, and are confident that no other person can furnish such treasures of Military Medicine, Surgery, and Pharmacy as he. J. O.

THE CONNECTICUT RIVER VALLEY MEDICAL ASSOCIATION.

This Society held its Third Annual Meeting at Bellows Falls, Vt., May 7, 1862. The President being absent, Dr. Lyman Brooks of Acworth, N.H., was elected President pro tem.

Drs. Crowley, of Mount Holly, and N. Grout Brooks, of Acworth, were then elected members of the Association. The Association then proceeded to the election of the following officers for the year ensuing.

President, W. H. Thayer, *Keene, N.H.*
Vice-President, H. H. Palmer, *Ludlow, Vt.*
Rec. Secretary, H. G. Holton, *Putney, Vt.*
Cor. Secretary, S. G. Jarvis, *Claremont, N.H.*
Treasurer, Saml. Nichols, *Bellows Falls, Vt.*

The President then called upon the members successively to state what diseases had prevailed in their several localities since the last meeting.

Dr. Simons, of Saxton's River, reported an epidemic of measles of mild type, there being nothing of particular importance to be noticed.

Dr. Sawyer, of Springfield, mentioned the following cases: 1st. A woman seven months advanced in utero-gestation was attacked with measles. The eruption was very slight. There was present from the first considerable congestion of the lungs, with aphonia. She passed on to her full time and was delivered of a dead child. She did not recover from the aphonia, and was left in an anæmic and anasarcous condition. He wished to inquire the influence of measles upon pregnant women.

2d. A man was seized, as he supposed, with severe pain in one of the molar teeth. He applied to a dentist, who extracted it. The pain increased, with swelling of both face and tongue. Suppuration followed, and exfoliation resulted. He would inquire what the Pathology of the case was. Was it one of simple periosteal inflammation? If so, would it not be best to cut down, as in other cases? Dr. Crane, of Springfield, had seen many cases of exfoliation of the alveolar processes.

Dr. Crowley, of Mount Holly, reported the case of a man who was ill three or four weeks with severe pain in the side of the head. At the end of this time a swelling appeared near the mastoid process of the temporal bone, the whole side of the face and neck being also slightly swollen. He made an incision of about an inch in depth without reaching any pus—a deeper incision, however, gave vent to a large quantity of thin sanious pus. Subsequently it was found necessary to make an opening three or four inches below. Dr. Scott, of Plymouth, also saw the case and confirmed the statement of Dr. Crowley; but could not understand why there was not more swelling with so large a quantity of pus. In answer to a question from Dr. Hallen, Dr. Crowley stated that there was considerable pressure from below upwards. Dr. Holton then remarked, that it was probably one of those cases in which inflammation occurring in the deep structures, pus had burrowed beneath the deep cervical fascia. This is a strong areolo-fibrous membrane, the superficial layer of which passes in front of the clavicle, and is last upon the pectoralis major muscle. If the deep layer be traced downwards, it will be found to pass behind the clavicle, extending from the cartilage of the first rib to the coracoid process, forming the fascia costo-clavicularis. Owing to this disposition of it, we sometimes have pus burrowed here and discharged upon the chest.

Dr. Porter, of Paper Mill Village, N. H., reported a severe case of puerperal convulsions in which venesection and opium were used without controlling them. He then resorted to the use of ether, and subsequently to ether and chloroform combined. The effect of this anæsthetic was continued for twenty hours. The labor progressed favorably. There were no convulsions after delivery, but he thought there was still some cerebral disturbance. Dr. Graves, who saw this patient with Dr. Porter, remarked that chloroform combined with ether had a much better effect than ether alone, and that when the effect was most powerful, the contractions of the uterus were most forcible.

Dr. Sawyer had seen several cases, which were preceded by cephalalgia, in which he had recourse to copious bleeding, which resulted favorably. Dr. Crane considered the pathology to be pressure on the motor nerves, and thought that might be removed by venesection and cupping. Dr. Crowley had seen five cases, all of which had occurred after delivery. He had relied on phlebotomy and cathartics, with cold applications to the head. Dr. Gregg, of Newport, remarked that in an extensive practice of over fifty years, he had seen a good many cases both previous and subsequent to delivery. He thought that in all cases where the contents of the uterus had not been removed, the first thing to be done, would be to remove it. He then gave the history of several cases which illustrated this. Chloroform and ether he had never used, but he would state, for the benefit of the younger members of the profession, that he had bled a patient to the extent of thirteen pounds in a day with great benefit.

On motion of Dr. Weeks, adjourned for dinner until two o'clock.

The meeting was called to order at two P.M. and on motion of Dr. Holton, Dr. Crane was invited to read a portion of the statistical report sent in by Dr. Webber. This related to epidemic diseases, and was listened to with great interest.

Dr. Styles, of Windsor, called the attention of the fellows to the bench splint, which he had used with great satisfaction. It could be easily manufactured from the materials always to be found about dwellings.

Dr. Scott related the case of a man who came under his observation with ununited fracture of the femur of eleven months' standing, which he succeeded in uniting by means of semicircular bands of iron. Strips of iron sufficiently long to extend over the seat of the fracture were placed anteriorly and posteriorly, the rings being then applied by means of screws, which pressed upon the parallel pieces.

Dr. Porter presented, and gave the history of an acephalous fœtus.

The following gentlemen were then appointed a committee to compile and publish the statistical reports:—Drs. Thayer, Webber, Whiting, Hasleton, and Holton.

On motion of Dr. Gregg, the following gentlemen were appointed a committee to examine the claims of candidates for admission:—Drs. Gregg, Sawyer, Crowley, Higginson, and Zwitchen.

On motion of Dr. Jarvis, the July meeting will be held at Brattleboro, and the autumnal one at Windsor. Dr. Edmunds then moved to instruct the Secretary to present the proceedings of the Society to one or more journals for publication.

The association then adjourned to the first Wednesday in July.

H. D. Holton, *Rec. Sec.*

Correspondence.

HOSPITALS AT FORTRESS MONROE.

New York, May 31, 1862.

[To the Editor of the American Medical Times.]

Sir:—Having recently returned from Fortress Monroe, I send you a brief statement of some of the objects of interest in the military hospitals of that vicinity. The old Hygeia Hotel, attached to the fortress, has been converted into a military hospital, with several hundreds of beds occupied by sick and wounded soldiers. About two miles west of this is the Chesapeake Hospital under the supervision of Dr. McCay, Brigade-Surgeon. The principal building in this locality is a large edifice known as the Chesapeake Female College; besides this, there are connected with this establishment two detached cottages and a considerable number of tents. There are six or seven hundred beds in the establishment occupied by medical and surgical patients, including a large number of soldiers wounded at Williamsburgh at the great battle on the 5th inst. Between the Hygeia and the Chesapeake Hospitals is the Mill Creek Hospital, under the supervision of Brigade-Surgeon Hunt. This is a gigantic shanty, containing two hundred and fifty beds occupied by soldiers who were wounded at Williamsburgh. The situation of the Mill Creek Hospital is low and marshy, and the air around it is redolent with foul odors. Among the wounded in these hospitals are many of the confederate soldiers, although the large majority is composed of men who fought for the stars and stripes. The soldiers of both armies are treated with equal kindness and care, and I have abundant evidence that the wounded rebels appreciate fully the kindness with which they have been treated.

All the wounds which came under my observation, were inflicted at the battle of Williamsburgh on the 5th inst., and they came under my notice on the 12th, exactly a week after the battle. They were then in a state of imperfect suppuration, the sloughs not yet having been thrown off. Nearly all of them were occasioned by musket or rifle balls, either conical or spherical. Some of them were occasioned by buck-shot or small bullets fired from revolvers. A few were occasioned by fragments of shells. In a few instances balls were lodged in the tissues; but, in most cases, they had passed through the body or limb, and had escaped through a second opening. In one instance, a single ball had made six holes, having passed through the fleshy part of both thighs and through the scrotum, without apparently injuring either testicle. In another instance, a ball had passed through the right forearm, and through the right side of the thorax, making four holes. In one case, a ball passed through the right side of the corpus cavernosum, thence through the root of the scrotum, and through the left side of the corpus spongiosum, making a free passage for the urine through the perineum, and without injuring the thigh. A young man from Mississippi was shot through both lungs: he discharged from the wounds enormous quantities of bloody and purulent fluids. He survived the injury more than three weeks, and almost to the last had sufficient strength to sit up when his wounds were dressed. One man had a wound of the hip-joint, the ball having passed through the great trochanter, and thence through the head of the femur, and across the dorsum of the ilium to the cleft of the nates. He lived eleven days after the injury. Another with compound fracture of the thigh near its middle, with extensive shattering of the bone, and with very profuse suppuration, survived the injury about three weeks.

There were a number of cases of secondary hæmorrhage. The first occurred ten days after the infliction of the wound. The case was that of a young man in whom the ball had passed from the upper and inner part of the thigh, a little below the pubes, down to the upper and outer part of the leg near the head of the fibula. The hæmorrhage was sudden and profuse, the blood issuing from the upper wound. As the track of the ball was very extensive, and the exact situation of the opening from which the hæmorrhage proceeded quite uncertain, I applied a ligature to the femoral artery, a little below the origin of the profunda. On the afternoon of the same day, I was called to see the patient again, being informed that bleeding had recurred. On opening the wound, I found a small recurrent artery near the lower part of the incision which I had made throwing out a jet of dark blood. I tied this little vessel, and there was no return of hæmorrhage, but the patient died of pyæmia eight days afterwards.

The next case of secondary hæmorrhage occurred on the day following the preceding case, viz. eleven days after the battle. It occurred from a wound in the mouth traversing the right side of the neck behind the angle of the jaw. The hæmorrhage was arterial and profuse; I tied the primitive and internal carotid arteries. The hæmorrhage did not recur, but the patient died from exhaustion about thirty hours after the bleeding took place.

The third case of secondary hæmorrhage occurred from a wound in the axilla, fourteen days after the battle. The hæmorrhage was very copious, and the patient appeared much exhausted. I cut down into the axilla, and tied the artery above and below the wound. I found that the median nerve had been severed by the ball, and that ganglioform enlargement had taken place at its proximal extremity. All the cases of secondary hæmorrhage which I saw were from the tenth to the sixteenth day after the injury.

Hoping that this hasty sketch may be of interest to your readers, I remain yours, etc., A. C. P.

Medical News.

Yellow Fever on Board a Spanish War Steamer.—The matter of the Spanish war steamer, *Don Antonio Ulloa*, was brought before the Commissioners of Health, and it being satisfactorily established that several cases of yellow fever had occurred on board prior to her departure from Havana, the following resolution was adopted:

Resolved, That in consequence of yellow fever having been on board the Spanish war vessel *Don Antonio Ulloa*, while in the port of Havana, the Health Officer be requested not to permit the ship to approach nearer than three miles from this City; and that no intercourse be allowed between the vessel and the City, except such official intercourse as may be necessary.

The civil registration of births, marriages, and deaths in England and Wales, began on the 1st of July, 1837. By the end of last year, six months short of a quarter of a century, this astounding number of names had been registered and transmitted to Somerset House: Persons married, 7,086,700; births, 14,278,790; deaths, 9,605,536; in all, 30,971,026, or more than the entire population of the United Kingdom at the present day.

By order of Gen. Brown, commanding in New York Harbor, Fort Wood will be exclusively devoted to hospital purposes, and is placed under the direction of Surgeon Satterlee. All sick and wounded soldiers arriving at Jersey City will be immediately transported to Fort Wood, whence they will be disposed of by being assigned to hospitals, turned over to State agents, or sent to their homes, or to Fort Hamilton, as may be directed by Surgeon Sloan.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 26th day of May to the 2d day of June, 1862.

Deaths.—Men, 77; women, 72; boys, 101; girls, 90—total, 340. Adults' 149; children, 19; males, 178; females, 162; colored, 8. Infants under two years of age, 125. Children reported of native parents, 20; foreign, 129.

Among the causes of death we notice:—Apoplexy, 3; infantile convulsions, 14; croup, 11; diphtheria, 10; scarlet fever, 18; typhus and typhoid fevers, 6; consumption, 58; small-pox, 7; dropsy of head, 20; infantile-marasmus, 17; cholera infantum, 5; inflammation of brain, 10; of bowels, 17; of lungs, 15; bronchitis, 4; congestion of brain, 11; of lungs, 4; erysipelas, 9; whooping cough, 2; measles, 2. 157 deaths occurred from acute diseases, and 28 from violent causes. 222 were native, and 118 foreign; of whom 72 came from Ireland; 54 died in the City Charities; of whom 12 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

May, 1862	Barometer.		Temperature.			Difference of dry and wet bulb. Thrin.		Wind.	Mean amount of cloud.	Humidity. Saturation, 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In.	.	.	.	.	.			
25th.	30.10	.04	60	48	70	9	12	N.W.	1	510
26th.	30.10	.03	60	48	70	9	13	NW to S.W	.68	510
27th.	29.70	.43	54	50	61	3	4	N.E.	10	816
28th.	29.80	.30	60	50	70	5	7	N.	5	642
29th.	29.90	.20	60	48	71	7	10	N. to S.	.05	600
30th.	29.80	.10	62	56	70	6	8	N.E. to SE.	6	660
31st.	29.82	.04	60	48	70	7	10	N. to S.	4	600

Remarks.—25th. Fine day, with fresh wind. 26th, Clear, wind fresh at mid-day. 27th, Light rain, one-half inch in all. 28th, Variable, light rain mid-day, clear late P.M. 29th, Fine day. 30th, Variable, light rain P.M. 31st, Very light rain at 6 A.M., variable sky during the day.

MEDICAL DIARY OF THE WEEK.

Morday, June 9.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Thomas, half-past 1 P.M.
- Eye Infirmary, 12 M.

Tuesday, June 10.
- Bellevue Hospital, Dr. Loomis, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.
- New York Hospital, Dr. Markoe, half-past 1 P.M.

Wednesday, June 11.
- New York Hospital, Dr. Cock, half-past 1 P.M.
- Bellevue Hospital, Dr. Sayre, Is. Hos., half-past 1 P.M.
- " Dr. Flint, Is. Hos., 3 P.M.
- Eye Infirmary, 12 M.
- New York Academy of Medicine, 8 P.M.

Thursday, June 12.
- New York Hospital, Dr. Halsted, half-past 1 P.M.
- Bellevue Hospital, Dr. Barker, half-past 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M.

Friday, June 13.
- Eye Infirmary, 12 M.
- Bellevue Hospital, Dr. McCready, half-past 1 P.M.
- New York Hospital, Dr. Markoe, half-past 1 P.M.

Saturday, June 14.
- New York Hospital, Dr. Cock, half-past 1 P.M.
- Bellevue Hospital, Dr. Wood's Clinic, 1 P.M.
- Ophthalmic Hospital, Drs. Stephenson and Garrish, 1 P.M

SPECIAL NOTICES.

The Examining Committee of Bellevue Hospital will meet at the house of Dr. James R. Wood, *No.* 2 *Irving Place, on Thursday, June* 12, 1862, *at half past* 7 *P.M., for the purpose of examining candidates for Junior Assistants to Bellevue and Blackwell's Island Hospitals to fill four or more vacancies in said Institutions. Gentlemen will send their applications and references to the chairman at once.*

James R. Wood, *Chairman of Examining Committee.*

Dr. Elisha Harris

has removed to

No. 43 EAST TWENTY-THIRD STREET,

Between Fourth Avenue and Madison Square.

Dr. Julius Homberger,

Specialty: Diseases of the Eye,

has removed to

24 West 12th Street.

Office Hours: { From 9—11 A.M. " 5—6 P.M.

Surgeon-General's Office,
Washington, May 10, 1862.

An Army Medical Board will assemble in Washington, D. C., on the 1st of June next, for the examination of applicants for admission into the Medical Corps of the Army. In addition to the ordinary requirements of moral character, medical and surgical knowledge, good academic education, and sound physical condition, the applicants must be familiar with the principles of hygiene and the conditions necessary to the health of the troops in hospitals, camps, and transports.

Applications must be addressed to the Secretary of War, through the Surgeon-General; must state the residence of the applicant, and the date and place of his birth. They must also be accompanied (references will receive no attention) by respectable testimonials of his possessing the moral and physical qualifications requisite for filling creditably the responsible station, and for performing ably the arduous and active duties of an officer of the Medical Staff.

Applicants must be between *twenty-one* and *twenty-eight* years of age.

No allowance is made for the expenses of persons undergoing these examinations, as they are indispensable prerequisites to appointment; but those who are approved and receive appointments will be entitled to transportation on obeying their first order.

There are now, and soon will occur, several vacancies in the Medical Staff.

John W. Shedden, Apothecary,

368 Bowery, cor. 4th St.

Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

P. W. Bedford,

PHARMACEUTIST,

removed to

745 *Sixth Avenue, near Forty-fourth Street,*

Opposite Sixth Avenue Railroad Depot.

Wm. H. Davol, M.D., late Physician to L. I. College Hospital, Brooklyn, removed to St. Paul, Minn.

References.—C. L. Mitchell, M.D., T. L. Mason, M.D., Prof. E. N. Chapman, M.D., of Brooklyn; Prof. Austin Flint, M.D., Prof. B. F. Barker M.D., of New York.

THE FIRST NUMBER OF THE

American Journal of Ophthalmology

JULIUS HOMBERGER, M.D., Editor.

WILL BE OUT IN THE COURSE OF THIS WEEK.

CONTENTS.

On Diphtheritis of the Conjunctiva. By Dr. Graefe.
On Strabismus Concomitans. By the Editor.
The Universal Society of Ophthalmology.
Journalistic Reports.
Paris Correspondence, etc., etc.

Subscription Price for one year (six numbers), $2.00; sample numbers, 25 cents.

BAILLIERE BROTHERS,
440 Broadway, New York.

NEW BOOKS.

Sent Free by Mail on Receipt of Price.

Appia (P. L.) The Ambulance Surgeon, or Practical Observations on Gunshot Wounds. 12mo. Edinburgh, 1862. $1.50.
Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Clinical Essays, by B. W. Richardson, M.D. 8vo. London, 1862. $2.00.
Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Gmelin (L.) Hand-Book of Chemistry. Vol. I. 2d Edition, revised. 8vo. London, 1861. $3.25.
Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Epilepsy: its Symptoms, Treatment, and Relation to other Chronic Convulsive Diseases, by J. R. Reynolds, M.D. London. $5.25.
Bailliere Brothers, 440 Broadway, N. Y.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians* (*principally country Physicians*) *Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bourbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Grannie contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Grannies daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyosciamus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it serves very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.

By SAMUEL R. PERCY, M.D.,

PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE VII.

RESINA JALAPÆ.—JALAPIN OF COMMERCE.

GENTLEMEN:—In one of our previous lectures we fully discussed the botanical characteristics and history of the jalap root, so that we need not in the present lecture again refer to them.

There are very few of the new medicinal preparations that vary more in their effects upon the system than the jalapin of commerce. This variation in the strength is owing to the different methods by which the commercial jalapin is prepared. I have seen samples that were but slightly purgative in doses of ten grains, whereas that which is properly prepared should act freely in the dose of one to three grains. The difference in effect is not owing to the variation in the different samples of jalap root used, but to the different methods of preparation by the venders of the article; for some are not content with giving all the resin the jalap contains, but in addition put with it the watery extract.

A great many analyses of jalap root have been made; all, of course, varying, because different samples of the root have been used. The most complete analysis is that made by Gerber, but there are a large number of others that are equally valuable in a commercial view as the amount of the active principle is given. Of these latter analyses, we shall select several, as they show at a glance the value of the jalap root, both medicinally and commercially.

GERBER'S ANALYSIS.

Hard resin,	7·8
Soft resin,	3·2
Slightly acrid extractive,	17·9
Gummy extractive,	14·4
Coloring matter,	8·2
Uncrystal. sugar,	1·9
Gum with some salts,	15·6
Vegetable albumen,	3·9
Bassorin starch,	9·2
Water,	4·3
Salt of lime, magnesia, and potash,	8·5
Loss,	4·6
	100·0

HENRY'S ANALYSIS.

	Light.	Sound.	Worm-eaten.
Resin,	12	9·6	14·4
Extractive,	15	25·0	25·0
Starch,	19	20·4	20·6
Woody fibre,	54	42·0	40·0
	100	100·0	100·0

S. PERCY'S ANALYSIS.

	False Jalap condemned by Drug Examiner. First.	Second.	Good officinal. First.	Second.	Very fine on string.
Resin,	4	2	17	14	23
Extractive,	9	8	13	24	23
Starch,	11	15	13	21	22
Woody fibre,	76	74	46	41	27
	100	100	100	200	100

It will be seen by these analyses, that the amount of resin in true officinal jalap varies very greatly, being as small as 9·6 in an analysis made by Henry, and as large as 23 in an analysis of a very superior quality of root, made by myself. The United States Government requires that no jalap shall be imported that does not yield 11 per cent. of resin. It will be seen, in the analysis given by Henry, that the worm-eaten jalap yielded a larger amount of resin than the other samples, and, therefore, it has since been argued, and universally taught in the books, that worm-eaten jalap was to be preferred for making the resin; but this is false reasoning, and is not according to facts. I will grant that the worm-eaten jalap is generally very dry, and, therefore, should yield a larger percentage than the same weight of root that is moist; but that the worms eat the starch, as it is alleged, and leave the resin, is all fiction. Years ago I tried a number of experiments to settle this question. I divided whole roots of jalap, and weighed them accurately, keeping one-half in a tightly closed jar, and putting the other half with jalap that was infested with worms until it became worm-eaten, and lost from six to fourteen per cent. in weight. This latter would powder much more easily than that kept in a jar, and when exposed to the drying box lost less in drying, but the percentage of resin, in an equal weight of the dried powders, varied but a mere trifle. The results were alike in three such experiments. You can draw your own inferences as to whether it is better to purchase a good sample or a worm-eaten one; but if you will visit the drug mills you will find that in jalap and many other substances, the age of administering worms in powder has not entirely passed away. It will be plainly seen, by comparing the analyses of Henry, that the worm-eaten root was originally the best jalap, as it contained, even after it was worm-eaten, a large amount of starch and a much less amount of woody fibre than the other samples.

In the analysis that I have given above of false jalap, I am happy to say that a very large quantity that came to this port was condemned by the Drug Examiner. The small amount of resin that I obtained from it was not purgative in doses of two grains. The last analysis given was of small selected roots, sliced in uniform-sized pieces, and put on strings to dry. I have seen but few such samples in the market.

Method of Preparing the Resin.—There are a great many formulæ for the preparation of this article, but the one I prefer is a modification of that of Christison. Into a glass or earthen displacement apparatus a layer of animal charcoal is introduced; upon this, coarsely powdered jalap, mixed with about one-half its bulk of animal charcoal, is placed. The whole is moistened with alcohol (eighty-six per cent.), and allowed to stand for twenty-four hours; percolation is then allowed to proceed, and fresh alcohol added until the percolate precipitates but little resin upon being dropped into water. The whole of the percolate is mixed, and the alcohol distilled off at a low heat until two-thirds of the alcohol have passed over. The residue is then slowly poured into cold water, from which the resin separates. It is then thrown upon a stretched strainer and washed with water, and dried. It may be kept either in rolls or powdered.

When thoroughly dried, this resin is nearly all soluble in alcohol; it is insoluble in oil of turpentine and fixed oils. It is soluble in alkaline solutions. A portion only is soluble in ether, amounting to 25 to 35 parts in 100. This portion soluble in ether is called the Soft Resin, while that part insoluble is the Hard Resin, or the Jalapin of Hume. A peculiar change takes place in this resin of jalap after it has been subjected to the action of ether. In a very interesting essay written by Mr. John Long, in the *Am. Jour. Pharm.*, vol. xxiii., p. 487, "On the Resins and Aqueous Extract of Jalap," he here states that after exhausting the ordinary resin successively with cold and boiling ether, which abstracted 32½ per cent. of soft resin, the residue "was treated with several portions of alcohol 95 per cent., both hot and cold, but was found to be only sparingly soluble in that menstruum, entirely soluble in diluted alcohol and boiling water;" and he repeated the experiment on medicinal resin, carefully prepared on a previous occasion, with like results. I have repeated these experiments of Mr. Long's, and find they are correct.

As I have before stated, a large quantity of the commercial resin is but of about double the strength of jalap

powder, and is prepared by making an aqueous extract, and mixing it with the resin. Although jalap root, when treated with water, does yield a portion of its resin, this resin is wholly absorbed from the aqueous extract by alcohol, and the residuum is quite inert. The resin taken up from this aqueous extract by alcohol is purgative in an equal degree with that prepared by alcohol as above directed. They are both hydragogue cathartic in doses of one to four grains. The soft resin extracted by ether is rather more active than the two resins combined, the hard resin being, in my experience, rather slower in its operation than the soft, and not so apt to gripe. The aqueous extract, if prepared from fresh jalap root, is slightly purgative, but if made after the extraction of the resin by alcohol, is quite inert. The addition of the aqueous extract to the commercial article is therefore fraudulent. Mr. Bullock has found a sample of "hard resin of jalap" in the market, which owed all its medicinal activity to 34 per cent. of resin of gamboge.

Professor Proctor (*Am. Jour. Pharm.*, vol. xxix., p. 108) gives a formula for the preparation of a fluid extract of jalap, which is intended to be a solution of the resin principle formed into a soap with carbonate of potash, and sweetened with sugar. His formula is a hydro-alcoholic fluid extract of jalap root, containing the strength of a fluid ounce of the root thus extracted in one fluid ounce of extract. It is in my opinion liable to two objections—uncertainty in its action, and unpleasautness of taste—both of which may be obviated to a great degree by using the resin in place of the jalap root. We have shown, by a number of analyses, that no two samples of jalap root contain the same amount of resin; we therefore have with every different sample of the extract a difference in strength. The hard resin does not possess a very unpleasant taste, nothing like the nauseous taste possessed by the hydro-alcoholic extract. I have, therefore, been in the habit of using the following formula in preference to that of Prof. Proctor:—Take of the hard resin of jalap, 384 grains; carbonate of potassa, 2 drachms; sugar, 4 ounces; diluted alcohol, sufficient to make the whole 8 fluid ounces. The resin is rubbed in a porcelain mortar with a portion of the diluted alcohol and the carbonate of potash; the balance of the diluted alcohol and sugar are then added. The mortar is placed on a sand bath, and heat applied until the sugar is dissolved. Each fluid drachm of this extract contains six grains of the resin, the maximum dose required; and the dose may at all times be easily calculated, as each minim contains one-tenth grain of resin. This has but little taste, but it can be further disguised by adding a little essence of anise-seed or ginger. This resinous soap of jalap is less irritating, and less apt to gripe, than the resin administered without the combination of an alkali.

Of the pathological effects and therapeutic application of jalapin, we need say nothing in this place, as we most thoroughly discussed them in our lecture upon Jalap.

In the *Oporto Medical Gazette*, Dr. Caucellas describes a case of poisoning by arum maculatum. A healthy child, three years old, while playing about, met with a basket containing the flowers, fruits, and roots of the plant, which had been collected for the benefit of the pigs after boiling. The child chewed and ate some of them; and, on returning to his parents, complained of burning in the lips and mouth. When seen by the doctor, the child was in a state of prostration; he did not speak, but often raised his hands to his mouth and throat, and occasionally uttered a piercing cry, rising up as if suffocated. The lips, the palate, the tongue, the amygdalæ, pharynx, etc., were swollen; and pain at the epigastrium was felt on pressure. He could not swallow, and died asphyxiated during the night.—*Brit. Med. Jour.*

Among the Representatives from New York devoting much time to the sick at Washington, is Mr. Wall, of Brooklyn, who donates to those wounded in battle all the compensation he receives as a member of Congress.

Original Communications.

REPORT OF THE MILL CREEK HOSPITAL, FORTRESS MONROE.

By FREDERICK D. LENTE, M.D.
of cold spring, new york.

The Hospital, which is a temporary wooden structure about two hundred and fifty feet in length, by about sixty in breadth, and sixty feet high at the greatest elevation, is situated on the Peninsula, about a mile from Fortress Monroe. There are at this time no partitions, and the one ward is no doubt the largest in the world, containing two hundred and fifty beds.

I opened the hospital by order of Dr. John M. Cuyler, Medical Director, on the 11th of May. The wounded, who had arrived the previous night from Williamsburg, were rapidly brought in by the ambulances. Most of them had received little or no surgical assistance since the battle, nearly a week before, as they were during all that time *in transitu* by ambulance or transport from the battle-field. But few operations had been performed.

I divided the building into four *wards*, which were separated merely by the aisles, running lengthwise and crosswise, and intersecting in the centre of the building. The beds were then arranged in sections of twelve each; each section having two rows of six each. There were twenty-two sections; and, as the nurses were relieved every six hours, it was necessary to have forty-four nurses, that each section should have one. Each ward had a *ward master*, and, when practicable, was also supplied with two extra nurses for following the surgeons during their rounds. The nurses were supplied by detailing soldiers from the regiments encamped near by; and one of the greatest annoyances I had to contend with in organizing and managing the establishment, was the frequent change of nurses; as, each day, some of them would be recalled to their regiment, and a new set detailed. This is a very serious evil in the military hospitals, and might, apparently, be easily remedied by *enlisting* a certain number of men as *nurses*. The soldiers were generally very *willing*, very respectful, and attentive; but, necessarily very ignorant of their duties, requiring incessant watchfulness and instruction. To prevent confusion as far as possible, in an apartment containing, during most of the day, some three hundred souls, patients, nurses, surgeons and assistants, visitors, etc., etc., all strange faces, I marked the nurses with red badges, the assistant nurses with white, the ward masters with yellow. By this some approach to order was secured.

The *wounds* were mostly made by musket balls and buckshot. When a bone was implicated, it was generally shattered into numerous fragments, which were, in many cases, driven far and wide among the surrounding soft parts. When the bone had been struck by a minié rifle ball, it shattered it at the seat of the wound, and then split it up and down for some distance. There were only two bayonet wounds, and but few shell wounds. Many wounds were apparently made by a flanking fire, as the balls perforated the arm, and either the walls of the chest, or the muscles of the back, making four openings, or passed through both thighs, except when the bone was struck.

I have been able to classify 214 cases, with regard to the *seat* of the wound. There were—of the *foot*, ten cases; of the *hip*, thirteen; of the *knee*, some involving the joint, and some the bones forming the joint, eighteen; of *lungs*, five; *walls of the chest*, eleven; *leg*, thirty-eight; *thigh*, thirty-six; *shoulder*, twenty-one; *genitals*, six; *skull*, three; *neck*, five; *face*, nine; *spine*, one; *arm and forearm*, seventeen; *hand*, six; *back*, three; *walls of abdomen*, seven; *abdomen*, five.

Six of those wounded in the *thigh* were also wounded elsewhere, some in more than one situation; four of those of the leg, five of the genitals, the wounds generally involving the buttock or thigh, five of the hip, five of the arm,

two of the walls of the abdomen, five of the shoulder, three of the walls of the chest. In some cases, there were four, five, or six different wounds, and yet the patients doing well. Many of the arm cases were very severe, necessitating amputation at the shoulder-joint, or exsection of the joint or shaft. The wounds, generally, in this and the other hospitals, were difficult of management—more so, Prof. W. Parker remarked, than any he had seen.

On admission, the wounds involving bones, and through the knee, and the few stumps, were in a very unfavorable condition. Of the flesh wounds, although generally of a complicated and severe character, most of them were in a good condition, and continued to progress remarkably well; water dressings being generally used. The wounds of the lungs did well; the patients suffering from them, had all expectorated more or less blood at first, but it had ceased when they entered the hospital. In one case, the ball entered at the lower part of the right lung, and emerged above the spine of the scapula, perforating the lung from bottom to top. The man suffered for a few days with pain and cough, and required the use of anodynes, but subsequently did well. It would seem from the experience of this hospital, and I believe the same remark would apply to the other hospitals, as far as I could learn, that a gunshot wound of the femur is far more dangerous than one of the lung. If, however, the ball should pass directly through the rib, shattering it, the case would be much more serious. In one of the two fatal cases, the ball passed directly through the middle of the sternum. One interesting feature of the gunshot wounds was the frequency of secondary and of recurrent hæmorrhage, and its obstinacy. This is not so remarkable in military surgery; but it is not so common to have, as we did frequently, secondary hæmorrhage in cases where the amputation, or other operative procedure, was done through perfectly healthy parts, at a distance from the track of the ball. In the first operation performed in the hospital, the ball had passed below the knee, and the advice of more than one surgeon was to amputate at the joint; but, fearing a subsequent sloughing of the posterior flap, I decided to go above the knee. Yet this man died on the sixth day of secondary hæmorrhage. The hæmorrhage, in all the cases, occurred before the period of ulceration of the ligature through the arterial coats. It is to be regretted that *post mortem* examinations of the stumps were not made, but it was utterly impossible without neglecting the urgent wants of the living. The matter was, however, afterwards discussed with several distinguished surgeons, to whose attention I brought the subject.

Dr. W. Parker had occasion to examine one case where death occurred from hæmorrhage after both ends of the wounded femoral had been tied by Dr. Bontecou in the Hygeia Hospital. He found the portion of artery between the ligatures sloughy, and that the slough had extended above the upper ligature, thus causing the fatal hæmorrhage. A similar instance has fallen under his notice during the present war. The general opinion was that the hæmorrhage is, in most cases, due to sloughing of the artery above the ligature, and that the sloughing is due to a depraved condition of the patient's blood, brought on by unfavorable hygienic conditions before and after the battle. Let us briefly examine what these conditions were. For some weeks before the army of the Potomac moved from that river, the men had been exposed to a great deal of rain and dampness; and for four weeks after they landed in the peninsula, they were more or less wet day and night, the rain scarcely ever ceasing; added to this, the labor which they performed must have been prodigious.* And, amid so much rain and mud, with the necessity of avoiding fires as much as possible, it is to be presumed that the proper cooking of food could not have been systematically attended to. Finally, a forced march through deep mud on the heels of a flying enemy, to Williamsburg, then an attack under a pelting rain, on the entrenchments, and a hard fight of several hours, then the wounded lying for some hours in the mud and rain, then jolted over horrible roads to the York river; then, after further delay, crowded on transports, where they could neither get suitable food nor proper surgical attendance, then the trip down the river, then another transference to ambulance, and conveyance a mile further to the hospital. Fatigue, loss of blood, loss of sleep, starvation; for such food as could be served under these circumstances was not that which the severely wounded could eat. Is it to be wondered at that the blood of these patients should have been dark, thin, diffluent, and defibrinated? But few operations had been performed on the field; and the bad cases, those of compound fracture especially, were in an exceedingly unfavorable condition for operation when admitted. The battle was fought on Monday, and they were admitted into the hospital on the Monday following. The limbs were in many instances greatly swollen, infiltrated, and discolored. In some cases, to wait was certain death—a painful, lingering one. To amputate was almost equally certain to insure death, but there was a forlorn hope, with a brave and hopeful patient, of saving life; and if death should ensue, it was a speedy and painless one. Once, I amputated close to the hip-joint in such a case; the patient died on the table soon after the completion of the operation, never recovering consciousness after inhaling the ether. Once, Dr. Alden March did the same in the lower part of the thigh, with a fatal result, a little less speedy. In many of the less desperate cases, where secondary hæmorrhage did not necessitate immediate operation, we waited in the hope that the general condition of the patient would be improved by the better hygienic conditions in which he was placed, and by the better food and nursing. But the local condition continued to grow worse, and if the patient rallied a little at first, he soon reached a point beyond which he could not be raised, and he then began to sink again. And we can hardly wonder at this, when we reflect on the conditions of the wound—a bone shattered into numerous fragments, and often split upwards and downwards almost to the adjacent joints, especially when a conical ball inflicted the wound; these fragments often driven into the surrounding muscles. This was the condition of most of the cases in which we amputated, and exsected. Dr. Macleod, in his "Notes on the Surgery of the War in the Crimea," well describes the condition of these wounds when left to take care of themselves—"I myself examined the limbs of a large number of men who died at Scutari during the early part of the war, and, in not a single instance almost, did I observe the slightest attempt at repair; but, on the contrary, invariably found a large sloughing chamber filled with dead and detached fragments of bone, shreds of sloughing muscle, and destroyed tissue, into which the black and lifeless bones projected their irregular extremities, and across which, lying in every direction, but seldom in the axis of the limb, were dead and detached sequestra, the 'fracture-splinters' of the accident." What was to be done with these cases under the circumstances? Clearly, one of two things—either amputate, and remove a source of irritation at once, or make a large incision, remove all foreign bodies, as splinters of bone, balls, etc., saw off the jagged ends of bone if expedient, put the limb in as immovable a position as possible, and hope for subsequent approximation of fragments, and a restored limb. Both these expedients were frequently resorted to. Exsection of the continuity of the femur, of the os brachii, and of the shoulder-joint, were liberally practised in the different hospitals. This was strikingly the case in the general hospital under Dr. Bontecou, where a large number of exsections were performed; the results of which, it is to be hoped, he will one day give to the profession. My connexion with the hospital ceased before the results of all our cases could be ascertained; but very many were fatal, especially the amputations; secondary hæmorrhage, sloughing, and exhaustion carried them off. *Pyæmia* was very rare, and we

* If any one wishes to form some idea of it, let him visit the vast roads, entrenchments, batteries, etc., stretching for miles in front of Yorktown, which General McClellan constructed in about three weeks' time.

had only one case of *tetanus*. To quote again from Macleod —"The depressed condition of body to which the hardships of war had reduced the men, made a severe compound fracture of the femur synonymous with death." I must quote still further from Dr. Macleod's language, so descriptive of what I myself noticed. "Many of our patients looked very well at first—appeared perhaps strong enough, and expressed such a confident hope in the result, as almost to deceive their surgeon. The injury might not appear very severe; the bone was undoubtedly broken, but it might not be much comminuted; and thus we flattered ourselves, and began a trial hopefully, which always ended in disappointment. The golden opportunity was allowed to pass, and so we entered on a road which led to death, whether through the portal of amputation or any other. The struggle soon began; suppuration set in. The disease which lurked in the 'blood and bone' showed itself."

Now, it may be asked, in view of the utter helplessness of these cases when left to themselves or to secondary operations—Whether it would not have been far preferable to have operated on the field, or as soon after the battle as practicable? If the worst cases had been amputated, and the more favorable cases of compound fracture incised freely, and the loose fragments of bone and rough ends removed, and an extemporized splint placed on the limb, it is certain that the journey would have been far better borne, and probably the wounds in a far better condition. Says John Bell, "it is less dreadful to be dragged along with a neat, amputated stump, than with a swollen and fractured limb, where the arteries are in constant danger from the splintered bones; and where, by the least rude touch of a splinter against some great artery, the patient, in a very moment, loses his life." The wounds of the knee-joint, especially, should have received earlier attention, as they are the most fatal of all, according to the large experience of the Crimean war. They were in a dreadful condition when admitted; the treatment pursued was generally to make a free opening on either side, and remove the ball if it had not made its own way out, and make a free outlet for the unhealthy discharge. But the cases, as usual, progressed unfavorably. At the present day, there seems to be a disposition to sacrifice too many lives at the altar of conservative surgery. Long ago such was the case; but nearly all the great authorities in military surgery finally came to the unwelcome conclusion, that to save life the limb must be sacrificed. It was found that, in the very cases of compound fracture of the femur where the patient survived, it was only to suffer from tedious necrosis, and abscess, and exfoliation, and to drag a comparatively useless limb after him the rest of his life, or finally to submit to amputation as a less evil. If such were the unpleasant experiences of the days of spherical balls—of Bégin, of Ribes, of Larrey, of Guthrie, of Hennen, of Dupuytren, of the French surgeons in the Crimea, according to the testimony of Macleod, how much more likely is it to be our experience with the terrible minié bullet?

A branch of Conservative Surgery, which might be more extensively cultivated by surgeons, is, the *prevention of all unnecessary loss of blood* in all operations, but especially in those pre-eminently designated *conservative*, large incisions about the joints, or along the shaft to remove fragments, or to resect. When the patient is already exhausted by hæmorrhage, and other unfavorable circumstances, the additional loss of an ounce or two of blood might turn the scale against him; and it is certain that several ounces are often lost in these operations from small vessels before they retract and are plugged up by the saving clot. Now, without the delay of a minute or two, half-a-dozen of the little ingeniously contrived serrefines might be put on to as many spirting arteries, and by the time the operation has been completed the clot has formed, and they may be removed. A general order insisting on the use of these little auxiliaries would save more lives and limbs than that which urged the substitution of exsection for amputation.*

* In a new "field case," and a very excellent one, just arranged by Dr. Gilbert of the army, he has included a number of these little instruments.

Those wounds treated in the Mill Creek Hospital, which did not involve fracture of the large bones, or injury of large arteries, that is, a very large majority of all admitted, although many were complicated and severe, were progressing remarkably well: about fifty had so far improved at the end of a week as to be transferred to a transport for conveyance to convalescent hospitals. During the first week only twelve deaths occurred. The ventilation of the building was almost perfect; in this respect, superior to any of the other hospitals; and, amid all the confusion and inconveniences incident to a hospital of this character, special attention was paid to the nutrition and comfort of each patient, a liberal supply of all necessaries, and many luxuries, having been furnished through the energy of the medical director, Dr. Cuyler, who merits the warmest gratitude of the thousands of sick and wounded who have passed under his supervision, and the devoted kindness and liberality of Mr. Barclay of Philadelphia, and Mr. Hayward of the Sanitary Commission.

This paper has, under the circumstances, necessarily partaken largely of a rambling and desultory character, and has extended itself to rather an inconvenient length, I fear, for your Journal. I had intended to notice the triumphant success of *sulphuric ether* as an anæsthetic in military surgery, as far as it was demonstrated in the Mill Creek Hospital, where no other anæsthetic was used, at least during my superintendence. But it must be deferred to another time and another paper.

Cold Spring, June 2, 1862.

REMOVAL OF A TUMOR

INVOLVING THE PAROTID AND SUBMAXILLARY GLANDS; DESTRUCTION OF THE TEMPORO-MAXILLARY ARTICULATION; REPRODUCTION OF JOINT, AND CURE OF PATIENT.

By E. S. COOPER, A.M., M.D.,

PROFESSOR OF ANATOMY AND SURGERY IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE PACIFIC, SAN FRANCISCO.

Some of the more prominent features of the following case were given in the *San Francisco Medical Press* during the progress of cure. I now give it in detail.

Case.—Miss S. F., æt. 14, was admitted into the Pacific Clinical Infirmary, in consequence of an enlargement of two years' standing, involving the parotid and sub-maxillary glands. The tumor had grown internally until it almost filled the fauces, giving rise to great difficulty in both deglutition and respiration, and these difficulties were rapidly increasing. The tumor was nodular, and very hard on the outer side. The ramus and angle of the inferior maxilla were pressed out of their places over an inch. The face was prodigiously deformed, the length of the tumor from the outer to the inner side being over three inches.

Operation, April 20, 1861.—The operation was commenced by ligating the common carotid artery above the omo-hyoides muscle. An incision was then made commencing at the upper part of the one made for ligating the artery, passing directly in front and terminating one inch above the ear. A large long flap was then dissected forwards, exposing the exterior of the tumor, which was soon found to involve not only the parotid and submaxillary glands, but all intervening tissues.

The tumor being now found so much enlarged on the inner side of the jaw that it was impossible to remove it without either cutting away the ramus of the jaw or otherwise detaching the masseter, temporalis, and pterygoid muscles, disarticulating the temporo-maxillary joint, and drawing the jaw forwards to make room for extracting the tumor, the latter method was adopted. The masseter was first cut away from its attachment to the zygomatic arch with the scalpel, after which a chisel was used and the ligaments concerned in the temporo-maxillary articulation divided. The attachments of the other muscles were also removed with the chisel, after which that side of the jaw, being set free, could readily be moved forwards to a con-

siderable extent. The detaching of the muscles from the bone also destroyed the adhesions of the tumor to it, which were firm on the inner surface of the back portion of the ramus. This part of the bone had been absorbed by the pressure of the tumor until it was as thin as paper.

The manner of removing these attachments with the chisel may require explaining, since the instrument is seldom or never used by others for this purpose, but it is a most excellent means of detaching the soft parts from the bones in any part whatever. It is used as follows:—The handle being held steadily in the hand, the edge is pressed close to the bone and moved in different directions, being constantly upon the watch that the instrument is kept between the bone and the soft parts containing any important tissue. To be more explicit; there is always a little space between the bone and important blood-vessels and nerves in the different regions of the body, and by keeping a cutting instrument directly in contact with the bone these can be avoided. Then, as the chisel is the proper cutting instrument for the case, its edge should be carried close to the bone with a sort of gliding motion.

The soft parts being cut away from the external surface of the tumor, it was pried out with the chisel, the attachments of the parotid gland to the deep-seated parts being exceedingly fragile and easily overcome. This difficulty, however different from what usually occurs in removing the parotid gland, was the easiest part of the operation.

Having now the posterior part of the tumor detached, and the side of the jaw movable forwards to a considerable extent, I could introduce my finger sufficiently under the angle and ramus of the jaw to seize the major portion of the tumor, and draw it outwards and backwards. This being done somewhat forcibly, its attachments to surrounding parts were shown and divided until the tumor was removed. The whole operation occupied three-quarters of an hour.

The tumor weighed seven ounces and two drachms. It was of a fibro-cartilaginous character, and had a calculus in the centre. Whether this was formed first in the parotid gland, and was the cause of the tumor or the product of it, I am unable to say. The diseased mass was completely encysted, except where it was adherent to the ramus of the jaw. This condition of the tumor aided greatly in its thorough removal.

Fortunately, the mucous lining on the inuer surface of the tumor was not broken, and the hæmorrhage, which was slight, from the recurrent circulation was all discharged through the external wound.

The patient rested well during the following night, and on the next day called for nourishment, which in liquid form was swallowed without inconvenience, and the little sufferer found herself in every way comfortable.

The after treatment consisted in the application of a piece of lint over the wound, which was closed by five sutures at equal distances from each other, and a roller around the head and over the chin, as is applied in fractures of the lower jaw. This whole dressing was kept wet in an evaporating lotion composed of one part of alcohol and ten of water. The evaporating lotion was applied every half hour, and continued for seven days, when it was discontinued, and poultices applied instead.

The major part of the wound made for ligating the carotid healed by first intention. The stitches in the upper part of the wound sloughed out in about ten days, so that the external surface of the ramus of the jaw was again in view, also the temporo-maxillary articulation; and at the end of two weeks the major portion of the exposed bone became covered with healthy granulations, so that the margins of the wound were approximated in order to promote the more rapid closure of the wound, which had rather been prevented previously until the condition of the bone was found favorable. During the operation, in breaking up the attachments of the muscles to the jaw, the periosteum was necessarily removed in several places, so that it was necessary to keep the bone in view until all was found to be right with it. In destroying the temporo-maxillary articulation, the articulating face of the condyloid process was injured, and I was unwilling to let the soft parts close over the joint until everything was healthy in or about it; and having long since discarded the idea that air admitted into joints is a source of irritation, or even of the least injury, I saw no objection to having the joint exposed to any reasonable extent.

Matters progressed very kindly, and at the end of seventeen days the commencement of the re-formation of the external lateral ligament could be distinctly noticed. In two days more, one could notice a fibrinous deposit connecting the condyloid process to the margin of the glenoid cavity, although it was so fragile that it would constantly break when the jaw was moved somewhat briskly, but soon attained strength enough to withstand the motion.

Sloughing of Bone.—A portion of the posterior surface of the ramus, and all the articulating face of the condyloid process sloughed, and was discharged at the end of seven weeks after the operation.

July 26th.—The wound is nearly entirely cicatrised, the motion of the lower jaw being almost perfect, and the deformity of the face comparatively slight.

Sept. 7th.—Improving in every respect. The wound is almost entirely cicatrised, and that over the temporo-maxillary articulation entirely so. This joint is so perfectly reproduced, that no one by looking at it simply could form an idea that it was ever interfered with further than was indicated by the cicatrix over it.

Jan. 10th, 1862.—The patient recovered in every respect, save the deformity caused by the cicatrix, and the loss of nervous power consequent upon the division of the pes anserinus, leaving that part of the face partially paralysed. This condition was constantly improving, and the tone of the parts had been so far regained that, when the mouth was quiet, no want of symmetry in the contour could be discovered on the two sides of the face. The little girl left the Infirmary to-day in excellent health and spirits, having gained seventeen pounds in weight since the operation.

EXPERIENCES IN
THE PRACTICE OF MILITARY SURGERY.

By DAVID P. SMITH, M.D.,

BRIGADE-SURGEON, AND MEDICAL DIRECTOR OF GEN. THOMAS'S DIVISION.

I. I DESIRE first to call the attention of the profession to amputation at or just above the knee-joint. I have performed this operation five times among the wounded at Mill Springs, and at Shiloh. In the first case, an amputation in the upper third of the leg, performed on the field by some very hasty person, to say the least, had resulted in sloughing of the flaps and protrusion of the bones. In the second a gunshot fracture of the tibia had reduced the bone to such a state of comminution that recovery was not to be hoped for, especially as the minié ball was not extricable. In the third and fourth cases, a similar state of things existed. And in the fifth a minié ball, entering between the inner hamstring and vastus, and passing inside of the popliteal vessels, had sunk deep into the posterior, inferior, and inner face of the outer condyle of the femur: from its bed it could not be extracted, even after the limb was removed, without an enlargement of the cavity; merely cartilage intervened between it and the cavity of the joint, and at the time of the operation, seventeen days after receipt of injury, softening of the bone and inflammation if the joint had proceeded to a great extent.

In three of these cases I made a circular incision perpendicular to the axis of the limb, at the height of the middle of the patella; then, dissecting up and turning back the skin to the width of four fingers, circular incision was made through the little muscular and more cellular tissue, and bone sawn just as it expands to form the condyles. This procedure, which I had often practised upon the cada-

ver at Clamart, affords the proper amount of flap. If you save more skin it is redundant.

In two cases, where the tibiæ had been smashed too high up for amputation in continuity, I made lateral skin flaps, by commencing my incision just on the middle of the patella, carrying it first downwards, then curving it across the limb, and terminating it just in the middle of the popliteal space, exactly opposite the point of commencement; thus forming a lateral skin flap of about five inches in length, and of a base equal in diameter to half the circumference of the limb. A similar flap being made upon the opposite side and dissected up, disarticulation may be done, and the artery divided at the very last, if thought best. Flaps of these dimensions will neatly cover the expanded condyles after dissecting out the patella, which had better be done after the raising of the skin flaps; but to do away with the irregularity of joint surface I prefer to saw off half an inch in thickness of the cartilaginous surface of the stump. I think no one who tries this operation will regret it. This also I worked out on the cadaver. The artery, vein, and nerve, are far out of harm's way, and drainage of the stump is perfect.

II. I had two cases on board of the Crescent City, that I had charge of, and ran up to St. Louis, full of the wounded from the battle-field of Shiloh, which to my mind showed that the risk of amputation at the hip had been greatly exaggerated. Two men were brought on to my boat from the battle-field, where they had lain without succor for three days with terribly shattered femurs. In each case the minié bullets had struck the bone when the knee apparently had been raised, thus causing oblique impact of the ball, and destruction of the bone for at least six or eight inches.

I advised amputation at the hip in each case, on account of the fracture being high up, and the soft tissues being much infiltrated. The gentleman to whom I assigned one case, however, preferred to amputate just below the trochanters. A little delay was unavoidably caused by the many fragments of bone, and a few hours after the operation, which was most skilfully done, the man died. In the other case I amputated at the hip-joint. After I had transfixed to form the anterior flap, and had cut down about four inches, Brig.-Surg. H. P. Stearns, of Hartford, Ct., dexterously slid in both of his hands, and compressed the arteries so accurately that on completing the flap no hæmorrhage followed. Disarticulation was rapidly effected, and a straight cut made down through the glutei muscles, so as to leave as little surface as possible to the posterior flap. The arteries in the posterior flap were tied first; I then made haste to tie the femoral and profunda, which had been perfectly controlled by my able, assistant. Not more than six ounces of blood were lost in the whole operation, and but little time was occupied. The operation was done on Sunday. The following Monday he was taken on shore to one of the hospitals in St. Louis. The last that I heard from him was that on Thursday he was still alive. I have taken measures to hear further from him. It may be a successful case.

As to the result of my amputations at the knee-joint I am sorry that I cannot inform the reader. We have been so constantly on the march that it has been impossible for me to follow up the result of the cases.

In each case, however, the appearance of the patient was far better than in the case of those who had had amputation performed higher in the thigh.

III. I ligated the femoral artery in Hunter's canal in two cases, in which secondary hæmorrhage occurred from gunshot wounds received at Mill Springs.

In the first case I was called at midnight, and found profuse hæmorrhage proceeding from an aperture of entrance between the inner hamstring and vastus of the right leg. A tourniquet, which had been applied to prevent immediate dissolution, was of but little avail. Ordering it removed, I inserted the forefinger of the left hand into the wound, which but just admitted it, and feeling the warm gush of blood, controlled it by pressure against the bone. Then, obtaining additional light, I made an incision both upwards and downwards from the wound, and slitting up the tendinous canal, exposed the artery, and tied it both above and below the ulceration into it. Then scooping out the clotted blood, I found the unextracted minié ball lying close behind the femur. This operation was done on the fourteenth day after receipt of the wound. The wound was lightly dressed, and the patient expressed much relief. Everything went on favorably until the third week after the operation, when a wasting diarrhœa sent in and carried off the patient.

The day after my operation upon the preceding case, my attention was called to the following one:—A small wound of entrance existed just over the inner surface of the condyle of the femur. The surgeon in attendance had not been able to pass a probe into it to any depth, and thought that the ball had rebounded from the spongy condyle. The man had just begun to complain of severe pain in the calf of the leg, and the limb was beginning to swell. No hæmorrhage occurred from the wound. Early the next morning the limb was found a good deal enlarged, and pain was severe. My diagnosis was ulceration through the coats of the popliteal or femoral artery, and consequent infiltration of the calf; I then raised the margin of the round wound over the point under which the shot must have passed had it injured the artery. Then directing a probe in the same inferred direction, it readily passed into a large cavity: still no bleeding. I cut upon the probe, and found that it led right down to Hunter's canal. A gush of blood coming, I ran my long bistoury up and down; in an instant had scooped out the coagula with my two palms, and in another instant had my finger on the artery at the ruptured point. Here again I tied above and below the opening. It was curious to observe the coagula slowly oozing up from the calf and out of the wound. The tissues in the popliteal space were greatly disorganized.

Here no reparative process took place; no granulations formed in the wound; the extremity became gangrenous; a diarrhœa, which he had had for months, increased, and he sank. This operation was done on the sixteenth day after receipt of the injury.

IV. I wish next to call attention to two cases of exsection of the shoulder-joint, that a little comment may be made upon some points. Had I been upon the ground I should have advised the performance of these operations soon after the receipt of injury. As it was, the operations were not done until, in the one case the 17th, and in the other the 19th day after the battle. In both, I made a simple straight incision down through the deltoid to its insertion. In these cases the bone being in fragments, deprives you of all leverage; however, the incision I speak of enables you easily to pick out the fragments and disarticulate. It is difficult to convey an adequate idea of the destruction or *devastation* done by the minié balls in these cases. Large and small, needle and chisel-shaped fragments of bone had been driven, just as if the bullet had been a minute shell and had exploded in the joint, into all the surrounding soft tissues. By the continued irritation—"ubi irritatio ibi fluxus"—the parts had become gorged with blood, which oozed forth abundantly upon every disturbance of the fragments. With all this oozing of blood there were spicula to be dragged out from the muscles and from direct contact with the axillary artery, vein, and nerves, which were imbedded like arrows shot into the parts, all making these the two most unpleasant operations I ever did. The sooner after the receipt of injury these exsections are done, the more fortunate and perfect will be their results. One of these cases died from pyæmia; the other did well. Two months after the operation, I heard that the wound had nearly closed, and he was beginning to use the arm.

V. In two instances, I removed a large amount of fragments from the shaft of the humerus, in each instance equal to at least two and a half inches of the entire shaft. In each of these cases it was the finger alone, introduced as a

probe, that conveyed any adequate idea of the extreme comminution of the bone. Indeed, in military surgery it is, in almost every instance, folly to place any reliance upon or attempt to gain accurate information with an ordinary probe. In these cases, too, the *dispersive* effects of the minié ball were clearly shown, for, not only were fragments of bone driven into all the surrounding tissues, but in one case, where the ball infringed just below the insertion of the deltoid and passed entirely through from the front, I found by my finger a fragment driven into the elbow-joint from between the coronoid process of the ulna and the articulating facet of the humerus. About two months after these operations, I heard that the arms had become rigid and were being used. I mention their having become rigid because I thought there was much danger of false joint, inasmuch as the exsections had occurred at the favorite place for that complication.

VI. The bullet forceps of Tiemann & Co., New York, deserves particular and extended notice. It has time and time again enabled me to extract bullets, that all other forceps had failed to move. I am not extravagant when I say that, in comparison with it, none other is worthy of the name bullet forceps. Indeed, I can truly say that, among the endless variety of instruments that I brought home from the Old World a year ago, I have not one for any purpose so triumphantly perfect as this bullet forceps of Tiemann.

Reports of Hospitals.

BELLEVUE HOSPITAL.

REPORT OF CASES OF MENINGITIS TREATED WITH IODIDE OF POTASSIUM.

[Reported by F. R. Lyman, M.D., House Physician.]

Case I.—Ann Gammon, married, native of Ireland, æt. 39. Admitted Sept. 24, 1861, with a child seven months old (service of Dr. Flint). Her history was obtained from her friends.

History.—Patient is generally healthy, of temperate habits; has had otorrhœa since childhood, the discharge ceasing about three weeks previous to her illness. Thursday, Sept. 19th, complained of headache all the morning; at 9 A.M., on going up stairs this pain suddenly became intense, and she was obliged to sit down. She screamed with the pain, which she described as going through her head like a knife, and then fell into a comatose state, from which she could not be aroused. At 10 A.M., an hour later, she began to vomit, which she continued to do at intervals until the 22d. She was roused partially from her stupor, so as to show that she heard any one who spoke to her suddenly, and with a loud voice. Several doses of oil and other purgatives were administered, but not retained. Enemas were given, but without causing a movement of her bowels.

Symptoms on Admission.—Patient lies in a semi-comatose condition, rouses up when called by name, replies to questions slowly and with a thick voice. Pupils contracted, but they respond to light; has photophobia; tongue large, thickly coated with a white fur; pulse 72, hard; extremities cold; indicates her head as the seat of her trouble; bowels not opened for over a week, according to her friends. Ordered, ℞. Ext. colocynth. co., gr. v.; ol. tiglii, gtt. j.; M. ft. pil. Sinapisms and frictions to extremities.

25th Sept., 9 A.M.—Patient in same condition. Bowels freely opened; had a *very* large black dejection. Ordered blisters to nape of her neck and temples. 26th.—Pulse 100, and of a jerking character; has slept some; the cornea has become less, and she answers questions more readily. Dr. Flint ordered pot. iod., gr. v., three times a day. There is a partial paralysis of the left arm to-day, and her mouth is drawn to the right side. The sensation and motion of the left arm are very much affected. Lower extremities are normal. 27th.—Patient for first time asks where she is, and about her children. Complains of the loss of power in the left arm. Has pain in head yet; says she does not remember anything since she had the severe pain on the stairs. Oct. 14th.—Patient's history from 26th is merely a record of her progress towards complete recovery. The pot. iod. was continued as long as there were any symptoms of disturbance. The face became straight, and the left arm and hand recovered their strength, though this was the last to be restored. Her urine was examined repeatedly, without finding a trace of albumen. The pain in her head was combated with repeated blisters, and was entirely relieved when she went out.

Case II.—Mary Miller, æt. 26, native of Ireland. Admitted to the Hospital Dec. 3, 1861 (service of Dr. Thomas). She was a well nourished vigorous appearing girl of moderately intemperate habits. Predisposed to phthisis. Menstruated at 14, always regular.

Monday, Nov. 24th, was taken sick with a severe pain in her head and limbs, and vomiting. Two or three days after her first attack she had a chill. Bowels regular until the 1st inst., since when she has not had a movement. Has had sleepless nights; has become very weak, and her appetite is lost; the pain in her head has been constant. Says that there was a boy sick much the same as herself in the house where she was living.

Symptoms on Admission.—Face and neck congested, eyes suffused and injected. Countenance dull, intellect slow. Skin hot and moist; she has a few petechial spots on the abdomen; abdomen somewhat distended, without tenderness; pulse 120 and quick; tongue moist, thickly coated with a white fur, large and tremulous; her head is very hot, and pressing on her forehead gives her pain. Nurse reports that since she has been in the ward she has had three spasms, in which she moved her head from side to side quickly, and frothed at the mouth. On physical examination of the thorax, crepitant râles were heard at the base of the lungs posteriorly as she was raised up, but they soon disappeared. Over the sternum there is a slight œdema of the tissues, no œdema of the feet. Ordered a blister, three by four inches, to the nape of the neck. Dec. 4th, 9 A.M.—Pulse 102, quick and small; tongue same; surface hot and dry; eruption very marked; intellect slow; breathes with an expiratory moan. The physical signs are as above noted. The blister drew well, and the pain in her head is relieved somewhat. 6 P.M.—On examination, converging strabismus is found to exist, more marked in the left eye; has vomited her dinner; has had another spasm. Ordered emplast. vesicat. three by three inches, over both temples; ℞. Calomel, grs. x.; ice to the head. Dec. 5th, 10 A.M.—Pulse 120; tongue large and coated; surface very hot and dry; countenance anxious, and expressing much suffering; pupils normal; pain in her head intense; has slight photophobia, with diplopia. While noting her case she was seen in one of the convulsions alluded to before. She frothed at the mouth and gnashed her teeth, but did not move her head or limbs. Did not sleep last night; is much more stupid than on her admission. 4 P.M.—Pulse 120, soft and compressible; inclines to sleep; does not answer questions as readily as heretofore. Dr. Thomas ordered eight leeches over the occiput; ice continued. ℞. Pot. iod. ℈iv.; aq. cinnamom., aquæ puræ, āā, ℥j.; M. ft. mist. D. ℥j. q. 4 h. (grs. v.) Dec. 6th, 10 A.M.—Pulse 108; general condition the same; has not slept any, but lies in a semi-comatose state, rousing up on being suddenly called. Since last night her urine, which was treated on her admission without finding anything abnormal, has been re-examined with heat and nitric acid, and found to contain albumen: Sp. gr. 1015. Dec. 7th, 9 A.M.—Pulse 106; pupils normal; photophobia present; capillary congestion around the face and neck very marked; intellect very slow; bowels have not been open since the operation of purge. 7 P.M.—Bowels continuing confined, she was ordered calomel, grs. x., which was immediately rejected, and she was then given grs. viii., which was re-

tained. Dec. 8th, 10 A.M.—Pulse 120; tongue clean; surface natural; has no pain in the head; bowels were not moved by the calomel; to have a saline mixture. 7 P.M.—Pulse 104; has slight pain in her head; bowels freely opened; has slept some during the night; pain in her head entirely gone; answers questions more readily than before; photophobia less; strabismus and diplopia are much improved. 7 P.M.—Sleeping. Dec. 10th, 9 A.M.—Pulse 96; tongue large and moist; whenever she turns in bed she has some pain in her head; slight strabismus still present; appetite begins to return; treatment continued. Dec. 11th to Dec. 16th.—Continued to improve; pulse ran at 72 for three or four days. The strabismus entirely disappeared. 7 P.M.—Strabismus again present; pulse 96; tongue natural; pain in her head, with slight photophobia and diplopia. Ordered cold to the head, and blisters to the temples, pot iod. cont. Dec. 17th.—Same symptoms as yesterday, only more marked; blisters to the back of her neck repeated; bowels confined since the 13th. Ordered calomel, grs. x. Dec. 21st.—From this date the patient continued to improve without further drawback until she went out. The strabismus existed long after she got up, and for some time there was considerable unsteadiness of gait. But she gradually recovered from these, and Jan. 22, 1862, patient was discharged well.

Remarks.—The greatest interest was felt in this case throughout, and especially when it first came under notice, from the difficulty of making a differential diagnosis between meningitis and typhus fevers. The fact that the patient came from a neighborhood which had sent many cases to the fever wards, and that there had been another patient sick in the same house, and finally, the presence of the petechial eruption, all led to the primary opinion that it was typhus fever, but the subsequent progress of the case cleared up all doubts, and the result of the treatment exceeded the most sanguine expectations that were entertained in regard to it.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, April 23, 1862.

DR T. C. FINNELL, PRESIDENT, IN THE CHAIR.

(*Continued from page 322*)

OVARIAN TUMORS.

DR. PARKER exhibited a multilocular ovarian cyst, which had been removed by ovariotomy from a lady, thirty-one years of age, the mother of three children, the youngest born last June. In January, 1861, on account of enlargement of the abdomen she supposed herself pregnant, but her physician having some doubts about it a consultation was called some time in June, when ovarian dropsy was discovered. She was then tapped, and about twenty pounds of ropy fluid evacuated. The canula remaining in at that time for three or four days a considerable degree of local peritonitis was excited. The fluid, however, reaccumulating, the operation for tapping was performed several times at intervals of four or five months. When first seen by Dr. Parker, about the 1st of April, she was relieved by tapping of about twenty pounds of fluid, three or four different cysts being emptied. Being anxious for permanent relief in the shape of an operation, Dr. Peaslee was called in consultation, and it was decided to remove the tumor. Menstruation had always been regular, occurring about the first of every month, and accordingly the time for the operation was fixed for the middle of the month (April). On the day of the operation it was found that for twenty-six hours previous she had experienced uneasy sensations, which were referred by her to menstruation, but as no discharge had appeared it was thought best to proceed. She was placed under the influence of ether, and an incision was made about four inches in length half way between the umbilicus and symphysis pubis down to the peritoneum. A quantity of serum then escaped from the cavity of the peritoneum itself. The adhesions in the neighborhood were very slight, and the trocar was introduced into the sac, and about two gallons of fluid were drawn off. In addition to slight adhesions at different parts of the tumor there was one about the size of a two-shilling piece existing between the sac and the under surface of the liver, and also a pretty firm band in the immediate situation of the canula, which had been left in after the first operation. When the surface of the sac was being separated, considerable hæmorrhage took place, and haste was accordingly made to find the pedicle in order to terminate the operation as soon as possible, and secure any vessels which might then be brought into view. The incision was then enlarged to ten inches, and the pedicle, about eight or nine inches in length, was found. The clamp was applied, but broke, a second one was then used, and the whole diseased mass, weighing eighteen and a half pounds, was removed. It was then found that the principal amount of hæmorrhage came from that portion of the inferior surface of the liver from which the adhesion was torn off. Pressure was first made with a sponge to control the oozing, but that procedure failing Squibb's liquid persulphate of iron was applied with the desired effect. The wound was closed with four wire sutures, and the clamp brought outside.

The operation was performed about two P.M., and at four the pulse was 120. At nine P.M., however, the patient having slept a couple of hours in the meantime, the pulse was reduced to 110. She then for the first time began to complain of uneasiness in the epigastric region. At one A.M. she began to sink, at six her pulse was 130, and at two P.M., twenty four hours after the operation, she sank and died.

The autopsy was made five hours after by Dr. Sands. The wound was found closed throughout its whole extent by plastic lymph. There were evidences of extensive adhesive inflammation over both the parietal and visceral surface of the peritoneum. There were no signs of hæmorrhage from the surface of the liver. A small amount of serum was found in the pelvic cavity, and the vascularity of the peritoneal covering of the uterus was quite marked as compared with the same tissue in the immediate neighborhood. The under portion of the liver near its right border was occupied by several soft nodules varying in size from a small shot to a cherry. A number of cysts were on the posterior surface of the bladder and uterus. The uterus was enlarged, but on being cut open showed no signs of menstruation having taken place. No graaphian vesicle was found ruptured.

DR. KRACKOWIZER expressed his surprise that so much should be said by authorities on the danger of prolapsus of the intestines during the operation of ovariotomy, as the abdominal walls from their relaxed condition as the result of over-distension were incapable of exercising any contraction. A wound of the abdomen in health would of course be complicated with protrusion.

DR. PEASLEE referred to a case which he had, where in operating the patient was seized with vomiting. The administration of the ether was in consequence suspended, and the bowels came out, giving a good deal of trouble before they could be returned.

DR. PARKER remarked that he did not like the clamp, and indeed was inclined to think that in some cases, for instance where a good deal of tympanitis existed, it would be productive of a good deal of harm.

DR. MARION SIMS lastly exhibited three specimens of ovarian tumors, and gave their histories as follow:—

The first case was that of an unmarried female, about twenty-nine years of age, who enjoyed ordinary good health until five years ago, when she first noticed an enlargement of the abdomen in the neighborhood of the right iliac region. This went on increasing in size until last Fall, when she consulted Dr. Emmet. He gave it as his

opinion that it was a unilocular ovarian cyst. She returned to the country, where she resided, and came to the city again in January. She had never been tapped, was quite emaciated, and measured sixty-two inches round the abdomen. I explained to her the dangers of the operation, and the chances for success. The operation was performed last February, and when the tumor was removed it was found to be a single cyst. I procured a clamp for this case, but it was not suitable to my purpose, and I simply used a few strands of soft wire, with which I perforated the pedicle, tying the ends on either side. She recovered with great difficulty from the anæsthetic, and vomited nearly all night. Her pulse was 108. Dr. Emmet gave her large quantities of Black Drop, by enemata. She vomited more or less for two or three days, at the end of which time she was in a very prostrated condition. I differ with Dr. Emmet in my opinion regarding the use of such large doses of opium. I suggested the propriety of smaller doses systematically administered, when from that time she commenced to improve, eventually getting well. The pedicle was some twelve or thirteen inches in extent, and was connected with the broad ligament instead of the ovary—thus, when the pedicle was drawn outside, the ovary also made its appearance. The ovary was returned and the wound closed. But during the second day the ovary was pushed out during the act of vomiting, and there it remained for three weeks, until the parts healed, when it seemed to have shrunk away and become agglutinated in the wound.

The other case was a lady about thirty years old, the mother of five children, the youngest about six years old. Soon after the birth of the last child, some enlargement of the abdomen took place, which gradually increased. About a year after, she consulted me, and, at that time, I did not think, with reference to ovarian tumors, what I do now, and accordingly gave her a very unfavorable prognosis, and advised her to prepare for death, like a good Christian woman. I saw her no more until the month of March last, when Dr. Van Buren sent her to me. Within the last two years she had been tapped four or five times. On examining the tumor, I found it constituted, in its upper part, of a large cyst, and, in its lower part, of a firm, semi-elastic kind of mass. The operation was performed about six weeks ago, in the way already described. The large sac was opened, and the tumor pulled out as far as possible, when we came to the solid mass. The abdominal opeuing was then enlarged to five inches, and the whole mass was removed. The pedicle was fastened, as in the former instance, with a wire. After removal, the tumor was found to be made up of a cyst, on the one hand, and honeycomb texture filled with albuminoid secretion, on the other. The recovery was complete and rapid, the pulse at no time being over 90 per minute.

The other case was that of a lady 38 years of age, who came to the city last October, and consulted Dr. Emmet. He expressed the opinion that it was a multilocular ovarian cyst, and advised her not to have it punctured, looking on such an operation as predisposing to adhesion. However, she fell into the hands of another physician, who advised her differently, and tapped her. The procedure was followed with great prostration and symptoms of peritonitis, which lasted for several days. The abdomen then filled up very rapidly, and in the course of five or six weeks the operation was performed again, and seven gallons of fluid drawn off: four weeks after she was tapped again. No unpleasant symptoms whatever followed the two last operations. After that I saw her and told her that her case was a very unfavorable one for operation—presuming from the great amount of constitutional disturbance which followed the first puncture that extensive peritonitis had taken place, followed by adhesion. I, however, proposed to her an exploratory operation. She consented to such a measure, but refused to take any anæsthetic. After the incision was made in the abdominal wall, the fingers introduced discovered firm adhesions on every side. In the efforts to break up some of the adhesions the large cyst was ruptured, and about twelve or thirteen pounds of fluid escaped. The operation of course was not proceeded with, and the wound was closed. She went on really well for a week after the operation, when the second case already related was operated upon. Dr. Mott and Dr. Stevens were present, and the former gentleman gave me the history of a case in which he some time ago tapped a patient for ovarian dropsy, but the wound remained pervious, an almost constant discharge being kept up from the sac. That case, he said, eventually terminated favorably. The idea suggested itself to me that it would be well to imitate nature in the case of the lady who had been tapped, and with the consent of both Drs. Mott and Stevens, I took a probe and gently opened the wound. About half a gallon of fluid escaped. But in the course of thirty minutes the patient was in a state of collapse, and she vomited for twenty-four consecutive hours. She was alarmed by the constant escape of the fluid, and begged me to stop it. This I did by closing up the wound with sutures, and, to my surprise, as soon as the exudation was stopped she began to rally, went to sleep, and for two days looked as if she were going to get well, but she died at the end of a fortnight.

In conclusion, Dr. Sims remarked, that the great improvement in the operation of ovariotomy as now performed, is in bringing the pedicle outside of the abdomen, and the substitution of the metallic for the silk ligatures.

No other specimens appearing, the meeting was on motion adjourned.

American Medical Times.

SATURDAY, JUNE 14, 1862.

A REMEDY FOR AN EVIL.

The many-sided phases of the War of the American Rebellion will furnish exhaustless themes for future aspiring historians. Its rise, progress, and downfall; its causes and consequences; its political and social bearings; its diplomacy; its romance and reality; its influences upon the progress of military, naval, and medical sciences—these are a few of its features which will be deemed worthy of record and preservation in the archives of American history. But who is to do the world the service of recording, with impartial hand, its bad surgery; the limbs wantonly sacrificed; the lives lost that would have been saved by timely operations; the unseemly incisions; the careless dressings; the neglect of medical treatment? These are not the most unimportant features of this war, but unfortunately they shun observation and record, and too frequently, alas! quietly seek the oblivion of the grave.

It were doubtless asking too much, that our surgical records of this war should be unblemished by fault or default. The principles and practice of military surgery are not all so firmly established that they can be invariably reduced to fixed rules. Too great license is still given to the army surgeon in the practice of his profession, even by our best text-books. The uncertainty arises from that diversity of opinion which grows out of statistical inquiry—too frequently most deceptive in its conclusions. But though we may not insist that the army surgeon shall have the highest degree of skill, we may require that he shall have an average knowledge of his profession, and exhibit in his practice a reasonable share of good sense and

sound judgment. This degree of knowledge should certainly be expected of one who has the unlimited power for evil of an army surgeon. We plainly do not demand too much, when we require that he should exhibit more professional knowledge and skill than a layman; and yet even this modicum of qualification is not always found, as the visitors to some military hospitals attest. There have been noticed stumps of amputated limbs in which the bone protruded several inches beyond the unsloughed flesh; others in which the flap was made by cutting from without inwards and from above downwards, instead of the reverse direction. It is true that these are very exceptional cases, but they prove, nevertheless, from what a low level the gradation of surgical qualification commences. Nor can they fail to suggest that if such utter ignorance of the mere art of surgery exists in the army, even to the most limited extent, what a deficiency in a knowledge of its science may be found. And if we trace these delinquencies to their legitimate results, who will not turn with horror from the page of history that bears their record?

We must not be understood as taking an unfavorable view of the Medical Staff of the Army at large; we believe that the surgeons in general are competent and fully adequate to their duties, and it is worthy of record that the best surgical talent of the country is represented in the corps. Nor are we deprecating a state of things which could easily have been prevented. The draft upon the medical profession of the country to supply the regiments with surgeons was excessive, and necessarily that floating class of practitioners who live by their "wits" rather than their knowledge, are ready to volunteer, and many found situations. We allude to the subject now because the sad results of incompetent, blundering, and inefficient surgery, are beginning to be apparent, and cannot longer escape notice.

Is there no remedy for bad surgery? Shall a class of surgeons in the army blunder through these rich fields which the ripe experience of the past enables us to improve, as ignorant of their duties as if in the armies of the middle ages? We think not. There is a simple remedy which the proper authorities might, and, we believe, in the interests of medical science and humanity, ought to apply.

Many of the rules of practice in military surgery are now so well established that they do not admit of question. The Sanitary Commission has done much to place these rules before the medical staff in a readable form, but they admit of much greater condensation. Let the Surgeon-General, or a Commission of Surgeons appointed by him, reduce these rules to aphorisms, provide each surgeon with a copy, and enjoin him to follow them strictly, where the rule admits of no doubt, and qualifiedly where the discretion of the surgeon *must* be allowed. It may be alleged that such a proceeding would be arbitrary, but it is simply a matter of saving life, and all individual feeling should yield. We believe, however, that the surgeons of the army would receive such explicit rules of practice with great favor, and follow them in good faith.

A LOOP OF RED-TAPE SEVERED.

We commented in our last issue upon the evils of Red-tape, and alluded, in passing, to the difficulties of obtaining the discharge and transportation home of the invalided soldiers. Simple as such a process might be made in the hands of any business corporation, it involves an amount of detail, travel, and annoyance, that would exhaust a person of ordinary physical energies. We heartily rejoice that this complicated business is to be simplified by an Act of Congress. No one can fail to appreciate the importance of the change who has visited those invalids, scattered through all the hospitals, and listened to their tales of disappointments. An evening paper thus aptly notices the matter:—

"In the House, Mr. McPherson offered a resolution in regard to the organization of the Army Medical Department. The object of Mr. McPherson was to cut in two an annoying and harmful piece of red-tape, which had prevented the execution of a wholesome act of Congress. Congress ordered that maimed and wounded soldiers, not fit to re-enter the service, may be discharged, if they request it, outright, from the hospital where they were sent. Instead of that, for some reason of red-tape, it has been held necessary, in order to obtain a maimed and homesick fellow his discharge, to send an application and certificate to his colonel, who sends it to his brigade commander, who must forward it to the division commander, who, when he gets time, sends it to the chief of the army corps, who forwards it to headquarters, where it necessarily lies at the bottom of an increasing mountain of more pressing matters. Meantime, hundreds of soldiers are languishing in the hospitals, homesick, anxious to get home, where they could have kind words and familiar faces around them, and cannot go, because the Army Medical Department is tangled up in a monstrous mass of red tape, which could be kept clear by vigorous exertions while our army numbered eighteen thousand men, but is fatally snarled now that half a million are to be looked after."

In this connexion we cannot withhold a private communication from a surgeon of a distant city who has spent much time in the army. He will excuse the liberty we have taken with his interesting letter:—

"I coincide most fully in the views expressed in the editorial of the Medical Times of Saturday last. A fearful responsibility rests somewhere in relation to the proper provision to meet the casualties and sickness of the Army of the Potomac. Many regiments were destitute of the simplest and most essential articles, and I was assured days must elapse before the articles could arrive after a requisition was made. The requisition was required to pass through *two* or *three* approvals, and finally be sent a distance varying from four to ten miles before it could be filled. I was credibly assured that the whole medical and hospital supplies of all kinds at that time there were on a *barge* not as large as most of those on the North River. And this was the amount of material for an army of one hundred thousand! Had not the Sanitary Commission come on with their enormous supplies, both for field service and fitting up transport vessels, humanity must have mourned at the fearful loss of life, for I have reason to believe, not *even a bed, sack, or blanket*, could have been spared for transport service, not to speak of the many other necessaries requisite. I do not pretend to fix the blame, nor to be critical or cavilling, but I did not meet with many who seemed fully alive to the fearful emergency before them. Look at the transport service, for which not one whit of provision was made, and by whom has it been performed? True, it has been in Government vessels, but they were fitted, equipped, and controlled by the Sanitary Commission. It is fortunate for the country that such accomplished, noble hands, were ready to assume it.

"I write with not the slightest view to publicity, but simply to assure you there is very *great truth* in your statements, and that a crying need exists for simplifying the long routinism—more than all to cause those of the Medical Staff who are doing administrative or staff duty, to know their responsibility does not end with signing this

or that paper, but their personal efforts must be added to give it efficiency."

THE WEEK.

The proper disposal of the sick and wounded soldiers of the armies of the seaboard has become, as we foresaw it must, a most important question. The hospitals at Yorktown, Fort Monroe, Washington, Philadelphia, and New York, are crowded, but the influx is on the increase. On Saturday last, the steamer C. Vanderbilt brought into this harbor six hundred and fifty wounded, a sufficient number to fill a hospital of reasonable dimensions. We are now in great danger of crowding the hospitals, already opened, to excess: it were much better to place patients in tents in the open fields. It is quite evident that the large cities of the seaboard are soon to be surrounded by hospitals, and that the sympathies of the citizens will be overtaxed by the constant and excessive draught made upon them. The proper method of meeting this exigency is to distribute the sick and wounded more widely than has yet been done. Instead of congregating them in large cities, they should be distributed in all our northern towns accessible to transports, care being taken to locate them as far as possible in the states from which they enlisted. We can mention fifty towns, and probably there are fifty more, where transports could discharge the sick directly at the door of the extemporized hospital; if each of these towns should receive three hundred patients, the total number provided with accommodations would be fifteen thousand. The advantages of this distribution of disabled soldiers would be very great. The sick would be in their native climate, and surrounded with associations tending to promote cheerfulness and health. The open country where such structures would be placed would be greatly preferable to city hospitals. The local community would take delight in bestowing their gifts personally upon the soldiers, and the supply of those delicacies for which the sick so frequently make inquiry, would be abundant. The medical attendance would be spontaneous, and untiring, and equal to any emergency. Let us then have small hospitals opened at every considerable town on the seaboard and on the large rivers, from the Chesapeake to St. John's.

—

We learn that Bellevue Hospital is to receive wounded and sick soldiers. This is a movement that should have been made before. At this season of the year its wards are but partially filled, and it can, without any great crowding, admit six hundred additional patients. The location of the hospital building on the East River renders it accessible to transports. The Hospital is at present in admirable condition, and we hope there will be no delay in opening its spacious and well appointed wards to the soldiers who require such accommodations.

—

The House of Representatives has passed a resolution directing our Generals to subsist their armies on the enemy. If this had been the early policy of the Government it would have saved much unnecessary suffering. At the White House the sick soldiers have recently suffered greatly from insufficient food, while the cattle of rebels were allowed to graze their pastures undisturbed. A volunteer surgeon of this State caused an ox to be slaughtered to relieve their destitution, and was severely reprimanded for his (humanity?) disregard of the rights of traitors. We shall now have less sickness and death in our armies.

—

The Philadelphia College of Physicians is about to erect a Hall for its special purposes, being stimulated thereto by the bequest of $30,000 by Prof. Mutter. This sum was assigned to the College on condition that a building was erected within a given time. The structure will be forty-five by one hundred and seven feet, the material of brick, and it will contain rooms for a museum, library, and hall for meetings. The College of Physicians will thus provide for Philadelphia what the Academy of Medicine should provide for the profession of New York. The Academy is the leading local medical society in the United States—probably embraces most wealth, still it is content to occupy a single badly ventilated room, without one facility for a museum or library. The Academy owes it to its own reputation to secure a suitable building of its own in a central position; it would thus greatly enlarge its influence, and become the generous patron of the profession.

Reviews.

Commentaries on the Surgery of the War in Portugal, Spain, France, and the Netherlands, from the battle of Rolica in 1808, to that of Waterloo in 1815; with Additions relating to those in the Crimea in 1854–1855, etc. Revised in October, 1855. By G. J. Guthrie, F.R.S. Sixth Edition. Philadelphia: J. B. Lippincott & Co. 1862. Pp. 614.

Notes on the Surgery of the War in the Crimea, with Remarks on the Treatment of Gunshot Wounds. By George H. B. Macleod, M.D., F.R.C.S, formerly Surgeon to the Civil Hospital at Smyrna, etc. Philadelphia: J. B. Lippincott & Co. 1862. Pp. 403.

A Treatise on Gunshot Wounds. By T. Longmore, Esq., Professor of Military Surgery at Fort Pitt, Chatham. Philadelphia: J. B. Lippincott & Co. 1862.

The three publications above mentioned, are timely issues from the press of the Messrs. Lippincott. The present war found us deficient in military surgical works, and so urgent was the demand, that the supply from abroad was never sufficient for the market. The reproduction of these standard works was, therefore, very important to the surgeons entering the volunteer army. Of the intrinsic value of the two first works it is not necessary to speak; they belong to the classics of surgical literature, and will long remain the best guides to the military surgeon. The last work is the reprint of an able article furnished to the *New System of Surgery*, now issuing from the London press, and embodies the present state of military surgical science and art. It is eminently worthy of reproduction in its present form.

—

Anatomy, Descriptive and Surgical. By Henry Gray, F.R.S. The Drawings by H. V. Carter, M.D. The Dissections jointly by the Author and Dr. Carter. Second American, from the revised and enlarged London Edition, with Three Hundred and Ninety-five Engravings on Wood. Philadelphia: Blanchard & Lea. 1862. Pp. 876.

This large and compendious work on anatomy has become the text-book of all our schools. As a treatise on general as well as relative anatomy, we cannot sufficiently commend it to the profession. The present edition contains the last revisions of the author, and has been rendered still more convenient for reference by the American editor.

Correspondence.

CONNECTICUT MEDICAL SOCIETY.

The seventieth annual meeting of this society was held in the city of Bridgeport on the 28th and 29th May, with a full attendance of Fellows from the county societies. There were also present, as delegates, Drs. H. D. Bulkley and J. G. Adams from the New York State Medical Society, and Dr. Usher Parsons from the Medical Society of Rhode Island. The first day was occupied in the transaction of routine business, and in the election of officers for the year ensuing. Dr. Josiah G. Beckwith, of Litchfield, was re-elected President; Dr. E. K. Hunt, of Hartford, Vice-President; Dr. Geo. O. Sumner, of Hartford, Treasurer; and Dr. Leonard J. Sanford, of New Haven, Secretary. Delegates were appointed to attend the annual meetings of the Massachusetts, Rhode Island, New Jersey, and New York State Medical Societies. Drs. Knight of New Haven, Hunt of Hartford, and Beckwith of Litchfield, constitute the delegates to the latter (New York) society. It was voted that the next annual meeting be held in Tolland county, the town to be hereafter designated by the committee. Drs. Jared Linsly and John G. Adams, of New York, were elected honorary members of the society.

In the evening the society was most hospitably entertained at the residence of Dr. Robert Hubbard of State street.

On the 29th the society convened at 10 A.M.; a larger attendance than on the day previous, amounting in all to seventy-five. Seven hundred and fifty copies of the Transactions were ordered to be printed, including the following papers:—On Diphtheria, by G. B. Hawley, M.D.; On Two Anomalous Cases of Disease, by D. Crary, M.D.; Hypodermic Medication, by B. H. Catlin, M.D.; On the Sympathetic Nerve, by M. G. Hall, M.D.; Case of Cerebro-Spinal Disease, by Ralph Deming, M.D.; Sketches of the Early Physicians of Norwich, by A. Woodward, M.D.; On Ligature of External Iliac Artery, by J. W. Lawton, M.D.; Plastic Constituents of thesBlood, by L. J. Sanford, M.D. Dr. H. N. Bennett, of Bridgeport, exhibited a case of resection of the shoulder joint for an enchondromatous tumor. Patient has now the free use of his hand and arm, and is in good health. Dr. B expressed the opinion that the operation was unique; he had never heard of resection of the joint for this disease. Dr. Catlin read the report of the committee on Registration; he deplored the ill-success which had attended the labors of the committee, more particularly as regards registration in the smaller towns and villages throughout the state. The President then delivered his annual address. Dr. White, of New Haven, read a dissertation on the Spontaneous Generation of the Infusoria. Dr. Knight made some remarks in relation to the New Haven Hospital; spoke of its prosperous condition, and of its capacity to accommodate three hundred patients. Dr. Jackson, of Hartford, was chosen Dissertator for the next year; and Dr. Robert Hubbard, of Bridgeport, alternate. In the afternoon the society dined together at the "Sterling House;" Dr. Knight presiding in the absence of Dr. Wm. B. Nash. He welcomed the members of the society, delegates from other societies, and invited guests. He remarked that but one member, as old as himself, was present, and that but eight or ten remain of those who were his contemporaries.

Addresses were afterwards made by Dr. E. K. Hunt (Vice-President), Drs. Bulkley, Rockwell, Talcott, Knight of Lakeville, Deming, Hubbard, and Childs. After which the society adjourned. A.

SHELTER CLOAK-TENT.

[To the Editor of the American Medical Times.]

Sir:—Allow me to call the attention of your numerous readers in the medical corps of our army to a new and comprehensive *Cloak-Tent*, recently introduced to the notice of the Belgian government, and which, although as yet but an experiment, deserves the consideration of a trial, as possibly assisting to relieve transportation trains, while at the same time furnishing the soldier with a shelter on the march as well as during the bivouac.

Capt. Sheureux, the inventor, proposes to furnish each soldier with a piece of india-rubber cloth, in the form of a rectangle, seven feet by three and a half, which on the long sides shall be pierced with eyelet-holes, having rings inserted in them. A small cord reeving through these enables the wearer, when marching in the rain, to gather one of the ends together in the form of a plaited cone; this passed over the head and hanging from the neck, entirely covers the man and everything he carries. At night, when desirous of converting it into a tent, he fastens one of the narrow sides to the earth, and elevates on a couple of sticks the opposite end—thus covering a space of about six feet by three and a half. His knapsack, serving for a pillow, is placed at the apex of the triangle thus formed, and his feet towards the open end and the camp fire. Four men by uniting their cloaks can in this way form a sort of Sibley tent. If the number of cloaks be still further increased, so as to impart a polygonal shape to the structure, there will be room enough for a fire in the centre, while the square ends of the cloth will always insure a large opening at the top for the escape of smoke and the purposes of ventilation. But this is not the general purpose sought for in their construction. They are more especially designed for one, two, or four men bivoucking by squads, and not for a larger number making a permanent habitation of it. The merits claimed for it by its author are, portability, shelter, less danger of fire, facility of construction and removal, and, lastly, by having their open ends towards the camp-fires, they conceal these latter from the enemy's observation.

Yours, etc., J. O.

Roslyn, May 31, 1862.

MILITARY HOSPITALS.

Newbern, N. C., May 26, 1862.

[To the Editor of the American Medical Times.]

Sir:—In the years 1838-39 I had the honor, by authority of the Board of Managers of the "Preston Retreat" of Philadelphia, and by a special committee of the College of Physicians (Meigs, Ruan, and Huston), to visit the several hospitals throughout Europe in order to obtain the best plan for the erection and organization of this Lying-in Hospital in Philadelphia. A large legacy had been left by a benevolent physician for this purpose, and it was thought that something might be learned from the examination of similar institutions in Europe. In this tour, which embraced England, Ireland, Scotland, Wales, France, Belgium, Prussia, Saxony, Austria, Switzerland, and Italy, I necessarily came in contact with various hospitals designed for other purposes than obstetricy. Among the institutions which I visited, none interested me more than the military hospitals. These were to me, of course, entirely new, our country not at that time having established many of the kind. This has been the case up to the present war. Our country now finds itself in a position demanding the immediate erection of a large number of institutions for the accommodation of sick and wounded soldiers. A war carried on by one million of men in the field, even for one year only, will incur the necessity of the establishment of economical accommodations for its soldiers after the war. The truth is, the battle of Bull Run opened the eyes of the Government to the pressing necessity of fitting up immediately proper buildings for the accommodation of the sick and wounded. The consequence was, and is, that large buildings in Alexandria, Georgetown, Washington, Philadelphia, New York, and elsewhere, have been fitted up for the temporary accommodation of the wounded. I say temporary accommodation, for it is not probable they will remain as permanent fixtures after the war is over. There will be many wounded and disabled men whom the Government must take care of during their lives. There will be many sick of diseases con-

tracted in camp who will equally need care and medical attention from the Government; and there will, in future, be a much larger standing army than formerly, which will annually supply large numbers of sick and wounded soldiers to these hospitals. The Government will be generous to these men. One or more *hotels des invalides* will be erected for them. A great deal of money has already been expended under the pressure of an urgent necessity for the present accommodation of these men, and a great deal more will be spent in the same way. The fact is clear to almost any ordinary observer that this mode of proceeding cannot continue long. Some permanent, safe, and economical structures must be erected, with all the necessary conveniences and hospital accommodations; they must be erected on high and airy places, outside of the thronged thoroughfares of large cities, away from the influence of malaria, and under the influence of proper military and medical discipline. The land must be obtained cheaply, the buildings must be erected economically, on plans which promise "the greatest good to the greatest number," and the organization of the institutions so arranged as to cost the Government as little as possible. Now, I do not know what money has been spent in this direction already, but I do not doubt that enough has been spent to have erected one or two fine, large institutions of this kind. In examining the hospitals of Europe, nothing attracted my attention more than the strong disposition exhibited by the several governments, through their agents, to obtain the best possible ventilation for the hospitals. Next to this, an equal temperature was sought for, high and dry ground was selected to secure fresh air, as well as for purposes of cleanliness. In France, Germany, and Italy I found stoves or *poêles*, the latter a kind of brick-work, in general use in the hospitals. In some cases, ordinary fire-places were used. The large wards of the hospitals in Rome and Naples, in addition to having no means of heating them, had cold brick or tile floors with a central gutter running through them, through which streams of water were allowed to pass to clean out the wards. I confess I felt cold and shivery in walking through the large wards of the Spedale Maggiore of Rome, during the month of December. A new hospital the same season being built in London was heated by pipes containing heated steam, and the lying-in hospitals of the same city, the best of them, were fitted up with carpets and the ordinary furniture of a well arranged house, including a good coal fire in the grate. The ventilation in some of the hospitals, especially the older ones, was simply the ventilation of windows opened and shut; in others a single pane would open, in other cases there would be perforations in the walls with valves at the ends and sides of the wards. These were accompanied with openings in the doors or in the walls near the floor, designed to keep up continuous currents of fresh air through the wards. The further south I went the more gregarious I found the people, the larger the wards in the hospitals, and the stronger the disposition to a *table-d'hôte* life; while in England and the north of Germany the disposition appeared to be to divide up the spaces, make the rooms small with fewer inhabitants, in more numerous apartments. The expense of keeping the atmosphere at a proper temperature during the cold weather would dictate this policy as a matter of economy. English exclusiveness, in my estimation, arises in a great measure from the surly and disagreeable character of the English climate. But, to return to the matter of our military hospitals, I would suggest to the Government the propriety of preparing at once to meet this necessity of the condition of our country. Let a competent person or persons be appointed to visit Europe if necessary, organize proper plans for the erection and conducting these military hospitals, and in general have the supervision of the matter. It will require more than one year to erect the buildings alone, and they should not be begun until the best possible plans, architectural and other, adapting them to the different climates where they shall be erected, have been fully determined upon. By taking a step thus early in this matter, the Government will save many expenses and losses, which would otherwise occur, under the pressure of necessities. I need scarcely refer you to the enormous losses of the Government occurring from the sudden calling out of half a million of men, without previous concert, consideration, or experience. There certainly have been great losses by the undoubted corruptions of the contractors of the Government, as there will be in almost any distribution of governmental patronage, but the inexperience of its agents in the duties which they were called upon suddenly to perform, is and was the real cause of many of the great losses suffered. Besides this, I would urge a movement at the present time in this matter, in order that we may have time to perfect the organization of these institutions. Our patriotic pride should induce us to make them as perfect as possible, better than those in Europe. Some of our institutions have for years been models to Europe, and there is no reason why we should not excel in this direction.

Yours, etc. JAMES BRYAN,
Brigade Surgeon, Burnside's Expedition.

FOREIGN CORRESPONDENCE.

BY PROF. CHARLES A. LEE.

LONDON, May 14, 1862.

As I promised to send you some "medical jottings by the way," I embrace the first opportunity to post up to the present time. Leaving New York on the screw steamer Kangaroo, we had a very rough and uncomfortable passage of fourteen days before reaching Liverpool. As usual, I suffered from sea-sickness all the way. Were I to name all the remedies and specifics for this malady which were recommended me on board, from *salt water* to *chloroform*, I should have no room for anything else in my letter. Suffice to say, I tried none of them but *champagne*, a basket of which was sent me by a friend, on board the vessel; this, cooled on ice, and taken *ad libitum*, came nearer my idea of *a specific* than anything I could imagine; *taken as a medicine*, for this, and other kinds of nausea and vomiting, I give my voice decidedly in its favor. Some of my companions, miserable wretches, took *chloroform*, on some anonymous recommendation, and suffered more from the remedy, as often happens, than from the disease. *Effervescent mixtures*, like soda and seidlitz powders, and "Farrant's effervescent mixture," of like composition, answered a good purpose in some cases. Most of the sufferers consoled themselves with the idea, that the after benefits would more than compensate for the present suffering; an opinion not exactly consonant with my own experience or observations. I am not about to trouble your readers with an essay on sea-sickness; for although I know much about it experimentally, I have little knowledge of its true pathology or proximate causes. No one is better acquainted with its symptoms and phenomena than myself, beyond this I make no pretensions. I will, however, venture to offer a reward of one hundred pounds sterling, to any one who will discover a certain and infallible specific, to be paid by penny subscriptions from all who experience its benefits.

The next subject which pressed itself on my attention, especially as a sanitarian, was the miserably deficient ventilation of the ship. As I occupied a cabin nine feet square, with only four other passengers, taken promiscuously, and that situated just over or near the machinery, where the smell of oil, tar, grease, coal oil, bilge-water, etc., was overpowering, and adjacent also to the cooking department, where, if I could not eat, I had all the benefit of the various savory smells given off by the various dishes, I may say that I labored under difficulties in attaining that degree of comfort which is desirable on a pleasure trip, although it might be endured with patience were there no remedy. We have studied hygiene and sanitary regulations on land long enough to transfer some of our researches, as it seems to me, to our vessels; and especially those engaged chiefly in transporting passengers. A more perfect system of venti-

lation on board ship is the great desideratum; and I am very glad to find it is occupying more and more the attention of the medical officers of the British as well as American navy. Although the surgeons of the Royal Navy have, year after year, represented in their Reports to the Admiralty, through the Director General, the influences injurious to health which prevail on board ship, and the best means of remedying them, and though some improvements in the ventilation of the public vessels of Great Britain have recently been introduced, yet they have not become general, and many of their regular sailing sailing packets and steamers are deprived of their benefits. The Reports, to which I have referred, are based on observations and experiences in ships of various classes and under every variety of circumstances and climate; and the same may be said of the reports of our own naval medical officers to our Naval Bureau. What is wanted is, the adoption of such measures as will obviate and correct the evils so fully pointed out. There is still ample room for improvement, both as regards cleanliness and ventilation, in the forecastle and steerage of our passenger vessels, notwithstanding all that has been done to better the condition of emigrants on board ship; affording them more space, by legal enactments; and also more healthy food, and better cooked, than when this class of passengers supplied themselves with provisions, and quarrelled over the coppers, in cooking it. There certainly ought to be some means of enforcing personal cleanliness among these unwashed foreigners; for to bodily filth may doubtless be attributed much of the sickness prevalent in the steerage. I trust some of our skilled sanitarians, such as Dr. Griscom, Van Buren, or Joseph M. Smith, may turn their attention more particularly to this subject of *naval hygiene*, and prepare a work, so much needed, for the benefit of those who "go down to the sea in ships."

In passing through the great manufacturing districts of England, especially in the iron districts of Lancashire, as Wolverhampton and Birmingham, I observed much of the vegetation killed, especially the trees and hawthorn hedges, which is not much to be wondered at, considering the vast amount of noxious gases given off in the various manufacturing processes. On inquiry I find that the evil has become so great, and the injury to animal and vegetable life so extensive, that Parliament, on motion of the Earl of Derby, has just appointed a Committee to inquire into and report on the subject. The vapors which have proved so destructive to vegetation, are chiefly given off in the manufacture of soda from sea water and common salt; some establishments employing 1000 hands, and turning out 100 tons or more of soda annually. Some of the chimneys to these manufactories are nearly 500 feet high, for the purpose of carrying off and causing to be dispelled in the air without injury, the muriatic acid and other vapors generated in the process of manufacture. But this has proved an inadequate remedy, and heavy damages have repeatedly been recovered by the large landed proprietors in their neighborhood, from the owners, for injury done to their crops, hedges, and trees, etc.; so that, in many cases, the manufactories have been destroyed or abandoned. The process of the manufacture of soda, in England, is carried on by the decomposition of common salt by sulphuric acid; and in most of the manufactories I find that the manufacture of sulphuric acid also is carried on in the same building, by condensing the sulphurous vapors given off, and, in three cases, no injury is sustained by the neighborhood, while the profits are much increased. A patent was granted several years ago, to prevent injury from such acid vapors by passing them through water, which has a strong affinity for them, thus condensing and utilizing them. This is said to have proved very valuable to the patentee, though it cannot have been generally introduced.

The injury to animal life is hardly less obvious throughout these districts than to vegetation. This is shown by the high mortality rate, amounting in some places to over 20 instead of 8 in 1000, the average mortality throughout England.

Since reaching London, I have visited some of the hospitals, and become acquainted with several medical men of distinction. Several whom I knew when here in 1849, are now gone; as Bransby Cooper, Dr. Pereira, Sir John Forbes, R. B. Todd, Dr. Quckett, Marshall Hall, etc. Their places, however, are filled by men of equal ardor and devotion to science, if not of equal merit. The improvements and advance in medical and surgical science within the last ten years are very obvious; and for many of these improvements, the world is indebted to London practitioners. Dr. Copland, who may certainly be ranked among the first of living practitioners and writers, is still actively devoted to the practical duties of his profession, notwithstanding the immense amount of physical and intellectual labor he has accomplished. Sir B. Brodie has recently retired from practice, owing to the failure of his eyesight, although he has reached that age when men naturally seek for quiet and repose. No one, in modern times, has attained a more exalted professional reputation than Sir Benjamin; and it will prove as durable as it is eminent, for it is founded on researches which have contributed to enlarge the boundaries of science; while he has ever proved an example, and exhibited a character calculated to elevate the medical and surgical profession in the respect and esteem of society and the world. He, undoubtedly, has the great consolation in his declining days, to feel that he has acted his part well in life, and discharged his professional duties conscientiously. He has retired to a beautiful situation, at (Broome Park) Betchworth, Surrey.

I shall endeavor to write you weekly, though my time is much occupied. In my next, I will confine myself to subjects more strictly professional.

Medical News.

LIST OF THE NAMES OF SURGEONS AND ASSISTANT SURGEONS APPOINTED TO THE VOLUNTEER REGIMENTS OF THE STATE OF NEW YORK, SINCE MARCH 8, 1862, AND THE CHANGES WHICH HAVE OCCURRED IN THE REGIMENTS IN THE FIELD FROM THE SAME DATE.

March 8, 1862.—Charles S. Wood, M.D., Assist. Surg. 66th Reg., vice James D Hewett resigned. March 18.—J. F. Blauvelt, M.D., Assist. Surg. 5th (Jackson) Artillery, organizing in New York City. March 21.—F. M. McLellan, M.D., Assist. Surg. Marine Artillery, promoted to Surgeon; Amos Geer Avery, M.D., Assist. Surg. Marine Artillery, vice F. M. McLellan promoted; John Z. Kreuter, M.D., Assist. Surg. 103d (Grimstein) Reg., organized in New York City. March 24.—James W. Casey, M.D., Assist. Surg. 105th Reg., Rochester and Le Roy organizations. March 25.—William C. Lewis, M.D., Surgeon 82d Reg., promoted from Assist. Surg., vice Alfred Powell on parole; Joseph W. Robinson, M.D., Assist. Surg. 82d Reg., vice Wm. C. Lewis promoted to Surgeon. March 28.—William H. Leonard, M.D. Assist. Surg. 51st Reg., vice John L. Dodge. March 29.—Fowler Prentice, M.D., Surgeon 73d Reg., promoted from Assist. Surg. 30th Reg., vice H. P. Bostwick resigned; James C. O'Neil, M.D., Assist. Surg. 25th Reg., vice Daniel H. Murphy resigned. April 2.—Charles L. Hubbell, M.D., Surgeon 12th Reg., vice Azariah B. Shipman promoted to Brigade Surgeon; R. M. Deering, M.D., Assist. Surg. 30th Reg., vice Fowler Prentice promoted to Surgeon 73d Reg. April 10.—Asa B. Snow, M.D., Surgeon 1st Engineer Reg. (Col. Serrell), vice A. P. Dairymple resigned. April 11.—Ernest Cotelle, M.D., Assist. Surg. "Enfans Perdus" Reg., organized in New York. April 18.—Andrew P. Sheldon, M.D., Assist. Surg. 58th Reg. May 12.—John L. Dodge, M.D., Surgeon 51st Reg., vice Ephraim H. Buck resigned. May 13.—John P. P. White, M.D., Surgeon 10th Reg., promoted from Assist. Surg. 9th Reg., vice John W. Hunt promoted; Andrew H. Smith, M.D., Surgeon 94th Reg., promoted from Assist. Surg. 43d Reg., vice Chas. Goodale resigned; Thomas Lawyer, M.D., Assist. Surg. 43d Reg., vice Andrew H. Smith promoted to Surgeon 94th Reg.; Henry J. Phillips, M.D., Surgeon 102d Reg., vice Charles Goodrich resigned; Conrad Joachim, M.D., Assist. Surg. "Seneca Artillery," vice Chas. J. Kipp resigned; Franz Mücke, M.D., Surgeon 58th Reg., promoted from Assist. Surg., vice F. Hessell resigned; Charles Stein, M.D., Assist. Surg 58th Reg., vice Franz Mücke promoted to Surgeon; James Chapman, M.D., Assist. Surg. 90th Reg., vice William W. Kinne resigned; William J. Burr, M.D., Assist. Surg. 59th Reg., vice Stephen P. Uhlein resigned. May 14.—Edward McDonnell, Assist. Surg. 1st Artillery, vice Alfred A. C. Williams dropped from the rolls. May 31.—P. Markoe Wright, M.D., Assist. Surg. Col. Dodge's Battalion of Mounted Rifles.

Erie County Medical Society.—The semi-annual meeting of the Erie County Medical Society will be held the second Tuesday in June, at the rooms of the Buffalo Medical Association, No. 7 South Division street.—*Buff. Med. and Surg. Jour.*

PUBLICATIONS RECEIVED.

The American Journal of Ophthalmology, Vol. I., No. 1, Julius Homberger, M.D., Editor and Proprietor. July, 1862. Bailliere Brothers. Pp. 48.

A Practical Guide to the Study of the Diseases of the Eye; their Medical and Surgical Treatment. By Henry W. Williams, M.D., Fellow of the Mass. Med. Soc. Boston: Ticknor & Fields. 1862. Pp. 317.

Hints and Observations on Military Hygiene; with the best means of Treating the Medical and Surgical Diseases of the Army. By Lawrence Turnbull, M.D. (Reprinted from the Medical and Surgical Reporter.) Philadelphia: 1862. Pp. 62.

TO CORRESPONDENTS.

H. V. P. (Peru, Ind.)—We must refer you to the author of the article on *Sarracenia Purpurea*, Dr. F. W. Morris, 84 Argyle St., Nova Scotia, for a specimen of the article. We are not aware that it is for sale in New York.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 2d day of June to the 9th day of June, 1862.

Deaths.—Men, 78; women, 78; boys, 78; girls, 81—total, 315. Adults, 156; children, 159; males, 158; females, 159; colored, 5. Infants under two years of age, 99. Children reported of native parents, 22; foreign, 117.

Among the causes of death we notice:—Apoplexy, 4; infantile convulsions, 15; croup, 6; diphtheria, 10; scarlet fever, 15; typhus and typhoid fevers, 10; consumption, 62; small-pox, 5; dropsy of head, 9; infantile marasmus, 15; cholera infantum, 3; inflammation of brain, 10; of bowels, 9; of lungs, 15; bronchitis, 7; congestion of brain, 3; of lungs, 2; diarrhœa 6; whooping cough, 2; measles, 1. 15 deaths occurred from acute diseases, and 27 from violent causes. 198 were native, and 117 foreign; of whom 76 came from Ireland; 45 died in the City Charities; of whom 10 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

June 1862	Barometer.		Temperature.			Difference of dry and wet bulb. Thrm.		Wind.	Mean amount of cloud.	Humidity. Saturn. 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In.	•	•	•	•	•			
1st.	29.82	.04	58	54	64	4	6	NE. to SE.	10	810
2d.	29.77	.06	70	56	84	5	8	NE. to SE.	7	754
3d.	29.90	.10	75	68	85	5	8	NE. to SE.	8	800
4th.	29.90	.10	54	48	60	2	3	N.E.	10	890
5th.	29.92	.10	60	50	70	5	9	N.E.	8	640
6th.	29.90	.08	60	50	72	9	12	NE. to SE.	3	510
7th.	29.70	.17	67	55	77	9	15	NE. to SE.	6	540

Remarks.—1st, Light rain morning and evening. 2d, Sultry; variable sky during the day. 3d, Fog A.M.; variable day. 4th, N. E. rain storm, very heavy P.M.; five inches fell in twelve hours. 5th, Rain early A.M.; clear late P.M. 6th, Fresh wind; variable; clear evening. 7th, Variable; sultry A.M.; fresh P.M.; rain with thunder and lightning late at night. Six inches of rain fell on a level during the week.

SPECIAL NOTICES.

New York Academy of Medicine.—Dr. S. S. Purple *will read the Memoir of the late* John Stearns, M.D., *the first President of the Academy, on Wednesday evening, June* 18*th. After which, the subject of "Ergot" will be discussed.*

Dr. Elisha Harris

has removed to

[No. 43 EAST TWENTY-THIRD STREET,

Between Fourth Avenue and Madison Square.

Dr. Julius Homberger,

Specialty: Diseases of the Eye,

has removed to

24 West 12th Street.

Office Hours: { From 9—11 A.M. " 5—6 P.M.

John W. Shedden, Apothecary,

368 Bowery, cor. 4th St.

Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

L. Lyons' Pure Ohio Catawba Brandy.

—The undersigned beg leave to inform the public, that they have established a DEPOT IN NEW YORK for the purpose of supplying the Trade at their Cincinnati prices.

All orders promptly attended to by

G. FRANCHERE & CO., No. 12 Broadway,

SOLE AGENTS.

[COPY.]

New York, April 2, 1862.

We have recently made a careful analysis of Lyons' Catawba Brandy for Messrs. G. Franchere & Co., of this city, from Samples taken by ourselves of 357 cases, and have found it to be a perfectly pure article without any foreign admixture. We, therefore, have no hesitation in recommending it to the public, as fulfilling all the requirements of a pure Brandy for Medical and other uses.

JAMES R. CHILTON & CO., *Analytical Chemists.*

To prevent imposition, the labels on the genuine article have the Certificate of Dr. Hayes of Boston, printed on them. *None Genuine without it.*,

SAMUELS & JACOB, Proprietors,

85 Columbia Street, *Cincinnati.*

Wm. H. Davol, M.D., late Physician

to L. I. College Hospital, Brooklyn, removed to St. Paul, Minn.

References.—C. L. Mitchell, M.D., T. L. Mason, M.D., Prof. E. N. Chapman, M.D., of Brooklyn; Prof. Austin Flint, M.D., Prof. B. F. Barker M.D., of New York.

THE FIRST NUMBER OF THE

American Journal of Ophthalmology

JULIUS HOMBERGER, M.D., Editor.

JUST PUBLISHED.

CONTENTS.

On Diphtheritis of the Conjunctiva. By Dr. Graefe.
On Strabismus Concomitans. By the Editor.
The Universal Society of Ophthalmology.
Journalistic Reports.
Paris Correspondence, etc., etc.

Subscription Price for one year (six numbers), $2.00; sample numbers 25 cents.

BAILLIERE BROTHERS,
440 Broadway, New York.

NEW BOOKS.

Sent Free by Mail on Receipt of Price.

Appia (P. L.) The Ambulance Surgeon, or Practical Observations on Gunshot Wounds. 12mo. Edinburgh, 1862. $1.50.
Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Clinical Essays, by B. W. Richardson, M.D. 8vo. London, 1862. $2.00.
Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Consumption, its Early and Remediable Stages. By Edwards Smith, M.D. 8vo. London, 1862. $3.25.
Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Gmelin (L.) Hand-Book of Chemistry. Vol. I. 2d Edition, revised. 8vo. London, 1861. $3.25.
Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Epilepsy: its Symptoms, Treatment, and Relation to other Chronic Convulsive Diseases, by J. R. Reynolds, M.D. London. $4.25.
Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

On Long, Short, and Weak Sight, and their Treatment by the Scientific Use of Spectacles. By J. S. Wells, M.D. 8vo. London, 1862. $1.87.
Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Psychological Inquiries. The Second Part; Being a Series of Essays intended to Illustrate Some Points in the Physical and Moral History of Man. By Sir Benjamin C. Brodie, M.D. 12mo. London, 1862. $1.60.
Bailliere Brothers, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

The Pathology and Treatment of Phlegmasia Dolens, as Deduced from Clinical and Physiological Researches. By F. W. Mackenzie, M.D. 8vo. London, 1862. $1.87.
Bailliere Brothers, 440 Broadway, N. Y.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York; and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians (principally country Physicians)*, *Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bourbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy*.

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations*, *Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyosciamus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.
By SAMUEL R. PERCY, M.D.,
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE VIII.

SOLVENTIA—SOLVENTS.

Gentlemen:—In our previous lectures we discussed at some length Headland's sixth and last order of the first division of hæmatic medicines. We described to you all the remedies mentioned by Headland, and explained as fully as the time allowed the peculiar conditions of the system in which they were found serviceable. I promised you yesterday that I would present to you a new remedy for the diseases for which a part of this class of medicines are used. I must repeat to you some of my arguments, that you may fully understand the therapeutic application of the remedy I now present to you. In a state of health the kidneys secrete a fluid, which, after remaining for a length of time in the bladder, is eventually passed away in a fluid state. But there are disordered states of the system in which the kidneys secrete the urine in a fluid state, but from some cause solid substances are deposited from this urine either in the kidney, the ureter, or the bladder. We have described and shown to you numbers of small calculi that have formed within the kidneys; we have shown you others that have been taken from the bladder, the nucleus only of which was formed in the kidney, and the remainder, by far the largest portion, was afterwards deposited around this nucleus in the bladder. We have shown you others the whole of which has been formed within the bladder. We have also shown you many specimens of deposits, some in a finely divided state, others in distinct crystals of small size. We see then, by these substantial evidences, that the urine does not always remain in a fluid condition, and that when it ceases to be fluid it causes grave difficulties, which may either take the life of the patient, or lead to the necessity of a surgical operation.

In diseased conditions, then, we see that there are substances which the urine is incapable of holding in solution, and that deposits take place in various parts of the urinary apparatus which sometimes form into calculi. The medicines that we have been discussing are used to hold these insoluble substances in solution, either by supplying some material deficient in the system, or by their solvent action upon the urine itself; and that they are successful in many instances we have abundant proof, by finding that the urinary deposits disappear under their use, and that after a time the medicine itself may be detected in the urine by chemical analysis.

With this slight repetition we will turn to the consideration of the little we have to say upon the subject of litholytics. We told you that litholytics, or solvents for stone, might be employed in two ways, either by the mouth or by injection into the bladder. Of the former method we spoke at some length, and of the latter method we gave you a few of the printed cases in point. I will now turn directly to the little I have to say to finish this subject by relating two cases from my note-book.

A man, about forty years of age, of irregular habits, applied to me for relief from a difficulty which, upon examination, proved to be stone in the bladder. I found, upon examination, a calculus of large size in the bladder, and upon examining the urine I found it contained a large amount of uric or lithic acid, with some urate of ammonia and mucus. If the urine was filtered, while warm, to separate it from the mucus and urate of ammonia, lithic acid crystallized in large quantities around the sides of the glass vessel. I had then a case before me where a calculus of large size existed in the bladder, and evidence from the state of the urine, that it was increasing every day. You will say probably that this was a case that should properly come under the care of the surgeon, and so far as the removal of the calculus was concerned I might agree with you; but what could the surgeon do to relieve the cause of the deposit of this lithic acid? This evidently belonged to the province of the therapeutist, as the difficulty would be only partly relieved by removing the calculus. It was necessary to remove the cause as well as the consequence of the disorder. Upon proposing medical treatment my patient was willing to listen to and follow out all my suggestions, but when I spoke of a surgical operation for the removal of the calculus, he peremptorily refused ever to have any operation performed. I then suggested the operation of lithotrity or crushing of the stone within the bladder, and with this view, after some weeks of preparation, my friend, Professor Alban Goldsmith, was called in to perform the operation.

We found upon examination that the calculus was free, and that it measured nearly two inches in length, by one and one-fourth inches in breadth, and that it was exceedingly hard.

The patient would take neither chloroform nor ether, and was exceedingly irritable from the pain that was inflicted, and insisted upon the withdrawal of the instrument before the crushing was complete. I saw him the next day, and he declared he would rather die than again undergo the same operation. Several irregular portions of the calculus had passed with the urine, and I found upon examining them that the exterior portion only was lithic acid, while the inner portion was urate of ammonia. As nearly as I could ascertain, the calculus was in three pieces.

There was considerable irritation caused by the sharp edges of the broken calculus, and for several days I was obliged to resort to a judicious use of morphia, and injections of tepid water into the bladder, to keep it distended. At this stage of the treatment of my patient I was taken with a severe cold, and a large amount of gravel was deposited at the bottom of the vessel I used. Upon testing this gravel I found it consisted of uric acid, urate of ammonia, and purpurine. One night before going to bed I passed a small quantity of highly colored urine, after which I took a warm bath, a dose of aperient medicine, and a large quantity of warm flaxseed tea. On getting up in the morning I found the urine that had been passed the previous night, of very dark-red color, and containing a very large deposit. The urine made in the morning was passed into the same vessel, and completely dissolved the existing deposit, the mixture of the two being perfectly clear and transparent, and no deposit in this fluid was seen again for several hours. This occurrence led me to think of the state of my patient. He was daily passing small broken pieces of calculus, and considerable gravel. Why should I not dissolve this within the bladder; and if fresh and healthy urine would dissolve a deposit when out of the bladder, why would it not also dissolve it within that viscus? Upon my next visit to my patient I caused him to urinate into a clean glass vessel; the fluid was very turbid, with mucus, uric acid, and urates. I then passed water into the same vessel, and nearly all of the sediment, excepting the mucus, was dissolved. The next day I passed about a pint of fresh urine from my own bladder directly into his, not expecting that the viscus would be able to retain it any length of time, for the organ was still irritable, and he seldom retained more than three or four ounces at a time. To my great surprise he retained this quantity in his bladder for nearly two hours; he said that it acted as a direct sedative to the organ, and that he had not been so free from pain for months. I entered upon the treatment of his disease with new interest, and he seconded me in all my efforts, for the

recovery of his health. I laid down strict hygienic rules, which were attended to; and three times in every twenty-four hours the urine from my bladder was passed into his. He daily improved in health, and after awhile his own urine was passed, free from sediment. By this treatment, in seven weeks there was not a vestige of the calculus remaining in his bladder. For many days after the commencement of the treatment he could bear but a few ounces of his own urine in his bladder at a time, but immediately after emptying his bladder he would bear eight or ten ounces of my urine, asserting that it gave him relief, and acted as a sedative. As his health improved he could retain his own water in large quantities.

I here give you then a solvent for calculus, not a new compound, but so far as my knowledge goes, *a new remedy*.

Since that time I have treated another person in a similar manner. This person was much younger, and he supposed that the calculus had commenced to form while spending some time in the south-west. The calculus was small, and not so hard as the one described above. It was of about the size of a marble, and from analysis of the urine I supposed it to be composed of the earthy phosphates, urate of ammonia, and mucus. This calculus was not crushed, but as in the last case described, particular attention was given to restore the health of the individual, as without that I conceived that no local solvent would be of much avail. My urine was in the same way thrown into this young person's bladder for about nine weeks, and as in the case before related, it caused an entire solution of the calculus, and also allayed the irritability of his bladder in a wonderful degree. As I told you in my last lecture, numerous solvents have been recommended for the purpose of removing calculi from the bladder, and much has been hoped for from their action, and there are instances on record where much benefit has been received. Mr. Butter, of Edinburgh, in 1754, recommended the injection of lime water into the bladder for the removal of calculi, and relates one case in which the calculus was completely dissolved by this means. There are several cases on record where alkaline solutions have been injected into the bladder, and dissolved the calculus, besides allaying the irritability of the bladder.

Mr. Ure recommends a solution of carbonate of lithia for the same purpose. Sir B. Brodie, in 1831, injected water acidulated with nitric acid, and relieved the irritability and dissolved a phosphatic calculus. Mr. Haskin, in 1842, used successfully for the same purpose a solution of the nitro-saccharate of lead, which decomposed phosphatic calculus. The *new remedy* which I present to your consideration is in my opinion the best and most natural solvent we possess, and will in many instances, with proper attention to the health of your patient, effect perfect solution. But let me caution you as to the quality of this *new remedy*. If you intend to use that from your own person, abstain from everything which would render it impure; nicotine is not natural to the secretion, and does not, so far as my knowledge goes, possess any solvent properties, and the organ into which you may pass it may not be accustomed to its effects. Alcohol in all its forms may not be tolerated by an organ in a state of irritation; therefore if you expect good results, abstain from these two poisons.

Dr. Prout asserted years ago his belief that urinary calculi might be dissolved by promoting in the patient a copious secretion of healthy urine, and he says upon this subject—"A perfectly healthy condition of the urine is not only one of the most natural, but probably also one of the most powerful solvents for all the ingredients likely to exist in urinary calculi that we can hope to possess. So satisfied am I of the general truth of this remark, that my belief is that there is scarcely any form of stone that would long bear the continued action of healthy urine without becoming more or less dissolved and disintegrated."

Since the introduction of Croton water in this city, we do not have many cases of urinary calculi, but those of you who practise in the West will find them in abundance. In addition to your hygienic treatment, let me urge you to try the proper therapeutic application of the remedy I have presented to you.

Original Communications.

ON THE NON-SHORTENING OF THE SUPRA AND INFRA-VAGINAL PORTION OF THE CERVIX UTERI UP TO THE END OF PREGNANCY.

By ISAAC E. TAYLOR, M.D.,

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN, IN THE BELLEVUE HOSPITAL MEDICAL COLLEGE, AND OBSTETRIC PHYSICIAN TO THE BELLEVUE AND ISLAND HOSPITALS.

It is a conceded and recognised fact, that great physiological changes in the uterus take place during gestation, that its walls become thicker, softer, and more elastic, and during this period that it undergoes no alteration of shape, although its cavity is considerably enlarged. It is, however, supposed, and in this most authorities agree, that the cervix uteri undergoes what is technically called, shortening, or "the behavior of the cervix during pregnancy;" and that at the termination of utero-gestation the vaginal portion no longer forms a conical projection in the upper part of the vagina, but that it is then considered as having merged or moulded itself into the body of the uterus, forming one cavity. Much importance is usually attached in works of forensic medicine and obstetrics to the changes of the cervix uteri, in relation to the time of pregnancy, its color, its softening, and its shortening.

The progress of this shortening has been computed by the gradual disappearance of its intra-vaginal portion. Thus it is held, that at the sixth month one-quarter is lost, at the seventh month one-half, at the eighth month three-quarters, at the ninth month to have entirely disappeared.

Entertaining entirely different views on this subject, I have presumed to dissent from the opinions of these authors, not only that the neck expands from above downwards, but from the opposite one that the changes occur from below upwards; and I do so with a high sense of esteem and admiration for their genius and attainments. But if medical or any other science is to continue to advance, no maxim should be considered established beyond investigation, and no authority, however high, ought to be held infallible.

The subject is one also of great physiological and obstetrical interest, and has many practical bearings of the highest character. This is especially true of placenta prævia; it conflicts, as I conceive, with the views of Barnes and Read; and tends to explain more clearly the views entertained by Doherty and Levret, as to why hæmorrhage does not occur when the placenta is implanted directly over the internal os of the cervix uteri; the fact is proved by the statistics of Trask, that little hæmorrhage takes place till the full term of gestation, but when the placenta is placed laterally hæmorrhage will occur. On this point I will not enlarge at this time, and shall defer it to another occasion. Two different views at the present day are entertained—1st. Those of Baudelocque and others, and, 2d, Those of Stoltz of Strasburg, approved by others, and first promulgated in 1826. The opinion of Baudelocque is, "That at the end of pregnancy, the neck forms, together with the body, a common cavity, and nothing remains but the small circle of the os externum." There is no supra or infra-vaginal portion. 2d. The view of Stoltz is, as stated by Cazeaux, "That the cervix uteri preserves its whole length until the last fortnight of pregnancy, when the whole neck is lost in the cavity of the body and disappears by a total effacement." Thus, both opinions arrive at the same conclusion at eight and a half months. To fully comprehend the opinions at the present day of these two schools, it

will be advisable to give the opinions as expressed by both schools up to the present day, when we shall better comprehend the subject.

OPINIONS OF AUTHORS.

Baudelocque.—"That at the end of pregnancy, the neck forms, together with the body, one common cavity, and nothing remains but the small circle of the *os externum*."

Smellie.—"In the ninth month, the neck of the womb being altogether distended."

Dewees.—"The neck begins from the sixth month to grow shorter and shorter, till at the ninth month it is entirely obliterated."

F. H. Ramsbotham.—At the end of gestation the cervix is so completely opened out, that it forms part of the general cavity.

J. Ramsbotham.—The same.

J. T. Ingleby.—After the fifth month the dilating power of the ovum is exerted upon the neck, which it dilates entirely from above.

E. Murphy.—"That the cervix is expanded to form part of the uterine cavity from the seventh month."

F. Churchill, adopting the views of Baudelocque, remarks:—"On examination, we find the vagina closed superiorly by the rounded lower end of the uterus, but no protruding cervix."

C. D. Meigs.—"At the close of pregnancy, the cervix uteri seems to have wholly disappeared, and the last days of gestation, not to be discovered at all."

G. S. Bedforn says:—"That after an examination at the seventh month the cervix uteri is more expanded, giving an increase to its various diameters, and then it is that you will appreciate the important circumstance, that the cervix commences to diminish in length; this diminution, remember, begins from above and not below, or, to be more explicit, at the *uterine* and not at the *vaginal* extremity; and further, I am emphatic on this point, as the learned Stoltz maintains an opposite opinion."

Velpeau agrees with Desormeaux, that the neck loses one-third of its total length by the fifth month, one-half at the sixth month, two-thirds or three-quarters at the seventh month, four-fifths at the eighth month, and the remainder disappears during the ninth month; and then adds, but frequent dissections and the most careful investigations have singularly impaired the confidence I formerly had in them.

Jacquemier.—In many females at the seventh month it is reduced one-half, at term the vaginal portion presents the slightest projection; and further, *direct observations* respecting the shortening and dilatation can make clear the question, though it seems reasonable to admit that the dilatation commences from above, slow and gradual, to the external orifice.

Tyler Smith.—"At the fifth month the cervix uteri begins to shorten its cavity, being taken up into the general uterine cavity by a process of development, commencing at the junction of the cervix with the body of the organ and terminating at the os externum."

Montgomery entertains the same views.

Cazeaux. [*Stoltz's views, given by Cazeaux.*]—When speaking of Desormeaux's views respecting the behavior of the cervix uteri, he says:—"I do not hesitate to pronounce all this an entire error, and to which I asked attention since 1839 *No.* The neck does not shorten in the way which has so long been described. It preserves its whole length until the last fortnight of pregnancy, and then the whole neck is lost in the cavity of the body and disappears by a *total effacement*."

He proves the truth of M. Stoltz's assertions in primiparæ, and says:—"For in these women the neck does diminish a little in length during the last two or three months, although by a process entirely different from that described by Desormeaux." And he goes on to say—"That the spreading out of the os tincæ and the inferior part of the neck constantly increases from *below upwards* as the gestation progresses. It reaches the middle part of the cervix about the seventh month, and nearly gains the internal orifice by the ninth. The enlargement of the cavity of the neck advances simultaneously with the softening of its walls, and that the cavity resembles a thimble in form in some women, whilst in others it is funnel-shaped, the base being below and the apex above. On the whole, therefore, the neck is fusiform in primiparæ, the external orifice is rounded, and so little dilated as to prevent the introduction of the finger without some considerable effort. In females who have had children the external orifice is widely opened, the cavity in the neck is funnel-shaped, the base being below, and which continues to increase until its apex reaches the internal os. This latter remains closed in both, in a vast majority of cases, until the last month of pregnancy."

And further—"There is no *projection* found at the upper part of the vagina, except in multiparæ a collar of variable softness, and in primiparæ a sharp thin ring is found."

Chailly.—At the ninth month, "In women who have had children, there is *no longer any neck*. The internal and external orifices become confounded, and are dilated to feel the membranes of the fœtus. In primiparæ the *supra-vaginal* portion still preserves a few lines which do not become effaced till labor commences. The *vaginal* portion is completely effaced. The external is open, but the finger cannot enter the internal os."

M. Duncan, advocating the views of Stoltz, gives five propositions, three of which are only necessary to state, viz.:—

1st. The length of the *cavity* of the neck undergoes little or no change during pregnancy.

2d. The capacity of the cervical cavity becomes gradually greater as pregnancy advances; and this is effected by an increase of its diameters or breadth, advancing from *below upwards*, that is, from the external to the internal os of the cervix.

3. Proposition.—"The length of the vaginal portion of the cervix, or the amount of its projection into the vaginal cavity, *generally diminishes* as the uterus rises into the cavity of the abdomen." Prof. Miller of Lexington, Kentucky, adopts the same view as Chailly, Cazeaux, and Stoltz.

Huter says, from many examinations—"That in most cases, the external os uteri opens in the last four weeks of pregnancy, that in most cases the internal os opens in the last week before birth."

Dr. Farre, in the Cyclopædia of Anatomy and Physiology, p. 646, in the article "Uterus," after stating the manner in which the cervix uteri expands, according to the views of Desormeaux and others, remarks:—"At the end of pregnancy, that portion which projected into the fornix of the vagina, is now *reduced* nearly to the level of the vaginal *walls*. But while it is true that a lessening of the projection of the cervix takes place during pregnancy, I can hardly coincide in the explanation which is usually offered of this circumstance, namely, that it is due to a gradual '*drawing up*' as it were of the cervix, by which its walls become added to those of the body of the uterus for the purpose of increasing the capacity of the uterine cavity. The true explanation of this, as it appears to me, is, that the apparent shortening of the neck is caused not at first by any diminution of its actual length, but by an increase of its breadth or its extension in the lateral direction, whereby the projection of the lips into the vagina is reduced to the *smallest possible amount*."

"When, therefore, the term shortening of the uterine neck is employed, it should be understood to imply that change which takes place from the hypertrophy and lateral extension of the vaginal portion of the cervix, combined sometimes with a separation of the cervical walls from each other occasioned by the descent of the head of the child; the degree of the descent being regulated by the amount of yielding of the internal os uteri."

Scanzoni, in speaking of the changes in the cervix uteri in primiparæ, says:—"At the end of the sixth month the cervical canal dilates, the external orifice and the canal are opened, whilst the internal orifice is closed and dilates

only at the last half of pregnancy." In multiparæ the same opinion as Cazeaux.

KRAUS adopts the like views, and gives the same plates of Desormeaux and Cazeaux.

During a service of four consecutive months, in the Bellevue Hospital, as well as in the Island Hospital, in the spring and summer of 1861, and also during a short service in the fall and winter, in the presence of the house staff, and several medical gentlemen and students, not less than upwards of one hundred and fifty patients have been examined by the touch and speculum, at various periods of gestation, from seven months to the full time, and during the first stage of labor in some of the patients. Nearly all, however, we e the completion of pregnancy. I am not aware that investigations relating to this subject at full term, and during the first stage of labor, have been conducted in the like manner, but the touch has been solely relied upon. Dr. Duncan, who has written an excellent article, and published in the March number for 1859, p. 776, says, after recommending the investigator to measure the length of the cavity by introducing his finger through the external os uteri:—"I would especially insist on the value of examinations made immediately before labor, when the cervix is extremely softened and largely dilated." And at page 774, "In discussing this subject, I intentionally omit the latter days of the ninth month of pregnancy, and diagrams of the cervix are made from the third to the eighth month." While a pupil of Cazeaux, in 1841, I became acquainted with the views of Stoltz, modified in some measure by Cazeaux; and after my return home, edited the work of Dr. Evory Kennedy on obstetric auscultation, where diagrams were introduced, showing how these changes of the cervix took place. Shortly after my service commenced, in 1851, in the Bellevue Hospital, my attention was especially called afresh to the subject, in a female dying in the first stage of labor from apoplexy, who was brought into the hospital from the street; and a second case in 1853, and another in 1854, at the same period. On post-mortem examination, no change was manifest of the supra or infra-vaginal portions, except in being softer and broader than natural. Just previous to presenting the subject before the Academy of Medicine in this city, in March, 1862, Prof C. R. Gilman gave me a specimen taken from a female, who died in the first stage of labor from placental apoplexy a few days before, where there was no change in the whole cervix, supra or infra-vaginal portion. Another specimen of my own was also presented to the Academy, showing how soon the neck returns to its natural size when there is no laceration of the os, taken from a patient who died in the Bellevue Hospital very soon after the child was born, where the whole neck was as perfect as though no labor had occurred.

Dr. DALTON (J.C.), in the March No., 1860, of the *New York Medical Journal*, said at the Pathological Society:—"He could say very positively, from his own observations, that neither the os internum nor the os externum disappears at all, even up to the end of the ninth month; and that he is very sure that he has seen both the os internum and the os externum clearly marked in a case that died during delivery."

The examinations of the patients were made by the touch, horizontal and dorsal position, and by various kinds of specula—the glass black-coated speculum preferred—and the records taken by the house staff, and several of the cases were delivered the same day, or one or two or three days after; and in many instances the infra-vaginal portion of the cervix was longer instead of being shorter.

To more fully comprehend and appreciate these investigations, it would be well to enter somewhat into the details respecting the appearance of the cervix and os uteri in multiparæ and primiparæ. The appearance of the cervix uteri, in both the multipara and primipara, was broader, softer, and in several instances longer than shorter, in comparison with the non pregnant uterus, examined at the same time. The measurements of Farre, Duge, and Velpeau differ only one-sixth of an inch in the whole cervix; and the infra-vaginal portion is stated at one-third to one-half an inch in the non-pregnant. Yet, in several cases, the measurement gave in these examinations one inch, usually three-quarter inch. The color, in the general run of cases, was of a light bluish red; in some, quite dark-blue, in others very little change had occurred, but sufficiently so as to differ from a simple congested cervix uteri by disease. In several, the physiological changes of color were so great, and the veins enlarged to such an extent as to become hæmorrhoidal; and in three or four instances, at the commencement of labor during the expansion of the cervix uteri, they were lacerated, and quite a hæmorrhage ensued; so much so, as to be mistaken for a case of partial attachment of the placenta. As a general rule, the vagina did not present that blueness spoken of by Kluge, Jacquimier, and Kilian, but the contrast of the cervix uteri was distinctly marked in color, as well as the entrance of the vulva, whilst the vagina was but slightly tinged. The blueness of the cervix uteri and the entrance to the vagina, was generally in the same ratio as the color of the areola. The ramollissement was the characteristic feature in nearly all of the cases examined by the touch, and in nearly all it was full, soft, and compressible, like wet chamois leather: this, however, was not always the case, as some did not present, even at the full term, this softness, though the bluish color existed. In multiparæ, if the os uteri had been lacerated by previous delivery, the os was pætulous and the cervical lips everted, showing the glandulæ nabothi; and the same would exist in some of the cases in primiparæ, where the cervix had been divided for dysmenorrhœa, or disease. The finger in these cases could be introduced to the full extent of the cervix, and the fœtus felt. But this was not attainable if the os uteri had not been lac rated or divided; and this will explain why, according to Cazeaux, the neck is funnel-shaped in multiparæ. In the primipara, it was seldom the finger could be introduced beyond a quarter of an inch, generally only a mere dimple or depression was realized by the touch, and the cervix presented a conical form up to the time of labor; but, being broader, longer, and softer than in the non-pregnant, the os was generally round, though sometimes it was a transverse slit.

In some of the cases of multiparæ at the seventh month, the finger could be introduced to feel the child, through the membranes; the os seemed to be capable of being dilated a quarter to a half inch in diameter, though the neck was not shortened. In the cases of the first stage of labor, the cervix, during an examination, would seem to be dilated to the size of a quarter dollar during contraction; but after the pain had ceased, the neck would appear fully three-quarters of an inch in length, and nearly closed, as though no labor existed. In many of the cases a cervical leucorrhœa existed, and in some of the multiparæ examined, after the finger had passed through the cervix, no discharge was perceptible, and, therefore, the cervical plug did not exist, as many suppose, up to the full term of gestation. When the position of the patient was changed from the dorsal to the lateral, the neck was, to the touch, longer, and more fully developed through the speculum, thus verifying on this point the result of such a change, as is shown in one of the plates of W. Hunter. The wood cuts were made from drawings of the cervix uteri which were taken during the examinations of the non-pregnant women, pregnant at full term, and first stage of labor, by M. Köhler.

CASES.

I.—Primipara—aged 20. (Dr. Lyman's.) Areola scarcely marked, nine months gone. Head in the cavity of the pelvis, cervix (vaginal) portion half inch long; by touch and by the speculum—soft, broad, feels like wet chamois leather—only a small dimple in place of the os. Examined June 26, confined July 1.

II.—Primipara—aged 23. Areola not well marked, nine months gone, head presenting, vagina rugous, vaginal neck ¾ inch in the vagina. Examined by the touch and speculum,

feels soft, broad, finger just engages with the os. Examined June 26, confined June 3.

III.—Primipara—aged 26. (Dr. Segur's.) Examined by the touch and speculum. Os virgin size, circular, ¾ inch in length. Examined August 17, confined August 21.

IV.—Primipara—aged 24. (Dr. Segur's.) Speculum, neck ¾ inch in the vagina, os small, soft. Examined June 26 and August 1, confined August 3. Confined out of the hospital, and called on me Sept. 3.

V.—Multipara—aged 20. (Dr. Segur's) Second child, os broad and patulous, neck one inch long to the touch and sight, rugous; speculum, hæmorrhoidal neck. Examined August 17, confined 21.

VI.—Primipara. (Dr. Segur.) Eight months three weeks, cervix, vaginal portion, one inch long, full, soft, slightly patulous, and by speculum hæmorrhoidal. Examined Aug. 17, confined 17.

VII.—Multipara—aged 22. Second child, cervix, vaginal portion 1 inch slightly opened. Examined Aug. 17, confined 23.

VIII.—Multipara—aged 28. (Dr. Fernandez.) Fifth child. To the touch, neck broad, soft, one inch long in the vagina, by speculum the same in length. Examined Aug. 1, confined Aug. 16.

IX.—Primipara—aged 29. (Dr. Lyman.) Eight and a half months gone, neck one inch long, and one inch broad in the vagina, round and full, os tincæ small, differing only from the virgin neck in softness and breadth. Examined Aug. 1, confined Aug. 17.

X.—Primipara—aged 19. (Dr. Segur.) Last menstruation Nov. 1860, head presenting, neck over one inch in length in the vagina, external os admitting the finger, neck firm as it approaches the body of the uterus. Examined Aug. 27, confined Sept. 16.

XI.—(Dr. Fisher.) Case at six and a half months, premature labor, symptoms of labor, liquor amnii not passed, to the touch os fully one inch broad, conical, os slightly opened, by speculum, neck fully one inch, membranes of a light green color, protruding through the os, confined next morning.

XII.—Primipara—aged 34. (Dr. Fisher's.) (Died with air in the heart.) First stage of labor Dec. 29, some hæmorrhage, touch, cervix uteri ⅝ inch long, admits the finger, depth of os 1¼ inch, speculum gives the same length ¾ inch, os round, conical, seen by several physicians—Dr. C. B. Smith and others.

ANATOMICAL VIEWS OF THE MUSCULAR STRUCTURE OF THE NECK OF THE UTERUS.

1. Sir C. Bell.—"I have not succeeded in discovering circular fibres in the os tincæ corresponding in place and office with the sphincters of the other hollow viscera."—*Med. Ch. Trans.*, vol. 4.

2. Dr. W. Hunter.—"The cervix uteri, where the peniform rugæ are situated, had not such regular nor such large fasciculi as the rest of the uterus."

3. Dr. Murphy.—"The existence of the circular fibres has not been proved."—*Lectures on Parturition*, p. 49.

4. Cruveilhier remarks: The neck of the uterus is composed entirely of circular fibres, which intersect each other at very acute angles. This opinion is corroborated by Jobert, who observes: That the uterine neck is formed by fibres which constitute semicircles, and decussate without mingling; the semicircular arrangement is more evident in women who have had children than others, and further adds: "That a superficial longitudinal layer on the posterior surface of the body passes into the posterior surface of the cervix."

6. Kölliker, after describing three layers of muscular fibres, longitudinal and transverse, of the fundus and body, remarks: "Whilst at the thinner cervix transverse fibres, especially intermixed with isolated longitudinal ones, are met with. In the neighborhood of the external os uteri, and in that part itself, highly developed transverse fibres lie immediately beneath the mucous membrane, and may be described as a sphincter uteri or occlusor of it."

Dr. Farre, in the Cyclopædia of Anatomy and Physiology, says: "The cervix cannot be said to consist, like the body, of three coats, but consists of a muscular and mucous coat only. On account of the large admixture of fibrous tissue with the muscular element here existing, this might with almost as much propriety be called the fibrous coat of the cervix. The large amount of white fibrous tissue and the density and compactness of the laminæ here found around the cervical canal, give to clear sections of this part an appearance of circles concentrically arranged."

This might be compared to the contractile fibrous tissue, which forms the dartos of the scrotum and the external tunic of the vagina, to both of which organs it gives an extraordinary amount of elasticity.

Remarks.—It will be perceived, with these views of the anatomy of the cervix uteri, that the uterus is ranged in the same class as are the hollow muscular organs, whose structure is also regulated by the fundamental law of muscular intercrossing, and these intercrossings in the neck give rise to the peculiar practice which has been especially called arbor vitæ; and as there are *four* longitudinal folds or striæ, each circle belonging to this set is composed of four sequelæ united on the mesial line, two anteriorly and posteriorly, and at the sides, and we have no difficulty in recognising these *circular fibres*, or penniform fibres, rendered horizontal by the expansion of the neck. It has been well observed by Kölliker, that, "The cervix and the os uteri are at rest during the active state of parturition, whilst the fundus and body contract, contractions of the former parts, and of the vagina, not ensuing till subsequently;" and thus "the uterus, as respects the disposition of its muscular element and its movements with other organs, never affords so apt a comparison as the bladder, in which the muscular tissue is arranged essentially the same way, as a physiological antagonism exists between the superior and inferior portions." To strengthen this view, we have the remarks of Todd and Bowman, in the Cyclopædia of Anatomy and Physiology—"On the Action of Sphincters, vol. i., p. 191. "Now their mass (the *sphincters*), and their contractility is superior to that of the walls of the cavity, consequently their passive contractility endures while that of the parts above is being gradually mastered by the accumulation of the contents (fæces, or urine), and when the excretions at length excite contractions in the walls of the cavity containing them, this overcomes the passive contractions of the sphincters, and evacuation occurs." And I would add as a still further and perfect illustration in these cases, the anus of the horse, as it exemplifies more clearly the manner of the gradual expansion of the cervix and the passage of the child's head through it into the vagina, and thence its exit, resuming its natural form, though modified in structure soon after the evacuation or delivery has occurred.

Proposition 1.—That the cervix uteri, supra and infra-vaginal portion, does not unfold or lose itself during gestation in the body of the uterus, and the cervix uteri become obliterated at the full term of pregnancy, as Baudelocque, Gooch, Dewees, Meigs, Montgomery, Bedford, and others, believe.

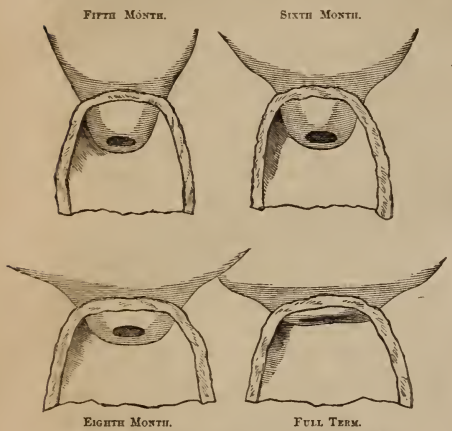
2.—That the cervix uteri is not lost or merged into the vagina, by dilating from below upwards, and becomes obliterated at eight to eight and a half months, as Stoltz, Chailly, and others believe, but remains of its natural length, and is sometimes longer.

3.—That the whole cervix uteri, supra and vaginal portion, remains intact up to the full term of pregnancy, and sometimes during the first stage of labor.

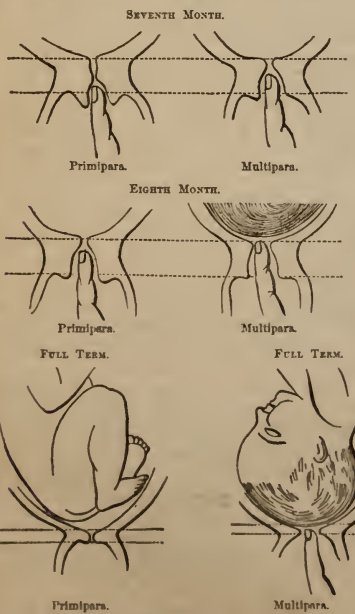
4.—That the shortening, as it is termed, is only apparent to the touch, consequent upon the ramollissement and physiological hypertrophy that take place during gestation, the cellular tissue becoming infiltrated by the changes incident to pregnancy, and hence its breadth is greater than natural and softer.

In multiparæ, where laceration of the os uteri has taken

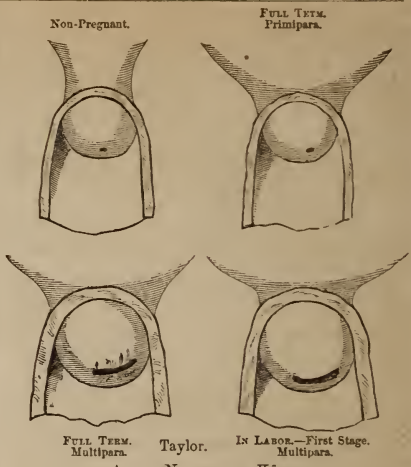
place, on one or both sides, and the glands were also diseased, the labia are everted and the os patulous, the same as is noticed in many cases of cervical leucorrhœa, and hence, the finger can be introduced at the seventh, eighth, or ninth month, to the internal os, and touch the membranes of the child, and should the cervix have undergone a more perfect softening, the os and cervix may be dilated



Baudelocque, Gooch, Dewees, Bedford, and Meigs.



Stoltz, Chailly, Cazeaux, Duncan.



After Nature by Köhler.

a half to three-fourths of an inch in diameter, though the whole cervix remains, supra and infra-vaginal portion.

5.—That in primiparæ, the finger cannot be introduced into the external os uteri; but in very exceptional cases, it may reach half way through the cervix.

6.—That the external os is always felt first, and not, as some have supposed, the internal os.

7.—That the secretion of the cervix uteri, which forms the so-called plug, does not remain to the full term, but is changeable from time to time.

8.—That the more perfect the softening the shorter the labor.

9.—That when labor sets in, especially in a primipara, the cervix (even if obliterated, and the os the size of a five-cent piece) can be clearly defined from the body, by the difference it presents to the touch of the thick, round, and soft portion of the body, and the tense thin membranous neck, and os.

10.—That after labor in primiparæ, if the neck has not been lacerated, the cervix uteri will return, supra and infra-vaginal portion, to its natural length very soon, though it is patulous and soft.

11.—That these propositions are also corroborated by cases where the complete separation of the vaginal portion of the cervix has occurred, and which could not have taken place if the neck was fully obliterated at term (case in Bellevue Hospital), also in cases of excessive œdema of the cervix, where the neck is one and a half to two inches in length.

12.—That from the investigations made during life, at various periods of pregnancy, at full term, and during the first stage of labor, and on post-mortem examinations, the cervix uteri does not undergo any shortening or expansion of the supra or infra-vaginal portion, but retains its whole length, and only becomes expanded or dilated at the commencement of labor, the cervix serving as an intermediate channel, or canal, between the body of the uterus and the vagina; this dilatation is effected through the combined operation of the softened condition of the neck, and by the pressure of the liquor amnii and the descent of the child's head or body, the internal os being the first to yield. The expansion thus beginning slowly, tends downwards towards the external os, and then the walls of the cervix are gradually expanded and unfolded for the passage or exit of the child; no better or more perfect illustration

can be adduced, than the gradual expansion of the horse's anus during an evacuation, and its contraction after an evacuation occurs. Some of the cases of labor in the hospital have illustrated the same facts; during the first stage of confinement, while the membranes have been protruded through the os tincæ, only a half inch in diameter, the child has been delivered soon after.

A CASE OF
SCOOPING A PORTION OF THE TIBIA,
FOR DISEASE OF TWENTY-FOUR YEARS' STANDING.
OPERATION; CURE.

By E. S. COOPER, A.M., M.D.,
PROFESSOR OF ANATOMY AND SURGERY IN THE MEDICAL DEPARTMENT OF THE UNIVERSITY OF THE PACIFIC, SAN FRANCISCO.

Case.—J. S., æt. 29, was attacked with disease of the tibia at the age of five years, in consequence of a slight bruise resulting in inflammation, which lasted for some time. Several small pieces of bone were lost at different times, after each of which the patient would generally improve to such an extent as to consider himself entirely well, and would remain so for a year or two. His attack of inflammation, by which he was led to consult me, occurred about four weeks since, during which time he has suffered much, and is now so lame as to be hardly able to walk at all. There are two serious openings leading from the surface to the diseased tibia, the centre of which can be penetrated with a probe readily and carious bone felt. There are several cicatrices at different points over the tibia, at which exfoliated bone had formerly been discharged. An abscess of bone was discovered, though it was impossible to ascertain whether or not it extended into the knee-joint. The mouths of the two sinous openings leading into the bone were directly over the lower part of the joint, but they both coursed obliquely downwards.

Operation.—The patient being placed upon his back upon a table, and chloroform administered, an incision five inches long was made, commencing at the lower edge of the patella and continuing down the spine of the tibia directly to the bone. A transverse incision of one and a half inches was then made over the tuberosity of the tibia, after which the chisel was taken, and the soft parts removed from the front of the bone, and both its sides. This brought in view an excavation in the interior part of the tibia filled with adventitious, soft substance, which on being scooped out gave vent to a small amount of purulent matter, and displayed a small cavity in the bone lined by a thick pyogenic membrane.

In dissecting this away, a small amount of pus was seen issuing from the parts below, when, on examination, a large abscess was found in the bone whence the matter was discharged. The anterior wall of this was bored through, when a considerable quantity more of pus escaped. The cavity of the abscess was now found to be about two-thirds the size of a hen's egg, and containing a large mass of pyogenic membrane in numerous folds. This was carefully removed, and the surface of the bony wall of the abscess cleared of all soft substance, when the operation was concluded.

Dressing.—The wound was dressed by applying a piece of lint in it, filling fully the abscess in the bone. A roller was then applied over the limb as tightly as the patient could conveniently bear, commencing at the toes and continuing to the upper third of the thigh. The lint and roller were wet in an evaporating lotion, when first used, and every hour or two after that for several days. During this period, all the secretions were carefully watched, and the patient occasionally took a dose of morphine, when in pain.

Sept. 7.—The patient has suffered little or no pain since the operation, and is in every respect doing well.

Five Months after the Operation.—Is walking almost as well as ever, though the wound is not entirely healed. In similar cases, I have occasionally seen the surface of the sore made by scooping of bone remain raw for two or three years, the cavity in the bone, during this time, slowly but constantly filling up ossific deposit. This condition sometimes remains long after the usefulness of the limb has been restored, the rawness of the surface causing no particular inconvenience to the patient.

SUDDEN DEATH FROM CORROSIVE SUBLIMATE.

By JNO. G. BIGHAM, M.D.,
MILLERSBURG, OHIO.

On the 25th day of May, 1862, I was summoned to see a child aged 18 months, which was supposed to have swallowed poison. The messenger reported that the child had taken something from a vial, and had immediately begun to scream violently and seemed to be suffering the greatest agony. He had brought the vial, still containing a small quantity of the poison, with him. Learning nothing from its color or smell, I wet the cork with it and touched it to my tongue; it produced a burning pain and corroded the mucous membrane, leaving a white spot. In a moment I could plainly perceive the acrid metallic taste characteristic of the bichloride of mercury, and I expressed the belief that it was an alcoholic solution of corrosive sublimate. The house was only a few doors distant, and I was there in five minutes after the occurrence of the accident. A liberal dose of sulph. zinc. and ipecac was given in warm water as promptly as possible, while a raw egg was being beaten up with a small quantity of flour. The child was evidently suffering the most excruciating pain. The face was flushed, the eyes protruded, the tongue was frequently thrust out, and the chest often violently expanded. There was severe retching, and the head was thrown back and tossed from side to side. A white streak extended from the angle of the mouth to the lower edge of the jaw on one side, and the dorsum of the tongue and the throat were also corroded. No considerable amount of the emulsion of egg could be conveniently given, and the child was so rapidly sinking, that it was not thought prudent to persist in attempts to administer the antidote.

The child was in vigorous health at the time of taking the poison, and it was dead in less than twenty minutes afterwards. There was no convulsive action whatever; during the last few moments the little sufferer seemed to have become insensible to pain, and gradually sank away in its mother's arms. In order to definitely decide the character of the poison, I put ten drops of it into fl. ʒ ij. of pure water and added a small quantity of solution of hydriodate of pot., when a bright red precipitate was thrown down. I then shook up the mixture and poured about the half of it into a clean vial, and added an excess of the solution of hydriodate pot., when the red precipitate (of biniodide of mercury) disappeared. To five drops of the poisonous solution, diluted in fl. ʒ j. of water, I added a few drops aquæ ammon., when a white precipitate was thrown down. To five drops of the poison in question, diluted in fl. ʒ ss. of water, a few drops of lime-water were added, when a brick-red-colored precipitate was thrown down; upon adding an excess of lime-water, and shaking the mixture, a yellow precipitate was presented. The gold-test did not prove satisfactory.

I have not any doubt but that corrosive sublimate killed the child, and since the death was more sudden than in any case I have ever seen recorded, I have thought it proper to submit the foregoing statement. I am sorry there were no means of ascertaining the exact quantity of the bichloride the child swallowed.

Dr. R. K. Browne, having been appointed Brigade Surgeon, has resigned the Professorship of Physiology in the New York Med. College and Charity Hospital. The chair is now vacant.

A PAPER ON

VENEREAL DISEASES,

THEIR MITIGATION AND SUPPRESSION.

(Read before the N. Y. Sanitary Association, Thursday, June 5, 1862.)

By H. LASSING, M.D.,

PHYSICIAN TO THE EASTERN DISPENSARY, NEW YORK.

That venereal diseases are greater evils than prostitution itself, no one will deny, neither is it requisite to prove that every one is more or less interested in the subject; the taint is to be seen every hour of the day, among all classes of society, and every parent in the land must feel a pang of anxiety for the safety of his offspring.

As syphilis and kindred diseases are never contracted spontaneously, but are always the result of impure communication, it seems to follow that it is within the range of human agency greatly to mitigate, if not entirely to eradicate it.

Leaving the question of prostitution, in its moral aspect, to the philanthropists and moralists of the age, our business is solely with the naked results everywhere discernible—syphilis and its kindred diseases, and efforts directed towards its abolition or mitigation.

While we consider the victims to the disease fit subjects of commiseration and professional care, we hold that to communicate it knowingly, is criminal. Guiding our actions in our intercourse with those afflicted by kindness and sympathy, while we offer them every inducement to submit to opportunities for a rapid and effectual cure, we deem it necessary that stringent measures should be enforced to prevent and discountenance the spread of the disease.

For these objects an association has been formed in this city under the temporary name of "The Samaritan Association for the Suppression of Venereal Diseases." We start on the fundamental points here laid down, and are now discussing the merits and demerits of various plans of operation.

We do not seek for a license system similar to the French, nor a system of suffrance and police restrictions like the German. A plan based upon the new Hamburg system, namely that of an association of physicians, appointing district surgeons, to examine prostitutes and give certificates if healthy, warn the public against all such not possessed of certificates, calling on those suffering from these diseases to come and be treated, and charging those served a moderate fee to support the enterprise, was the one at first proposed. Upon a closer examination, however, it was found that the plan would not meet with the success in practice, in *this* city, which in theory it appears to promise. The greatest objections are that it would be virtually supporting the entreprise by the wages of harlotry and sin, be cried down by the community as a money-making concern, fail in reaching the masses of those whom we want to get at, give rise to many, perhaps greater, evils and abuses, and was generally found impracticable.

Although our city, in its vices and blemishes, may in some respects assimilate to European cities, it is in many respects different from them, and most essentially so in its "social evil." All are independent here, feel and act so, but none more so than the lower classes, and particularly that class whom any effort of this kind must reach. They will not bear arbitrary or what they will call despotic treatment; they must be made to feel that our efforts are not made with mercenary motives nor in a spirit of persecution; that we deem it a favor more than a duty, if they will assist us in carrying out our enterprise for the good of the community.

Hence it follows that our service to them must be gratuitous and unhampered by any objectionable condition, and we must, as well for this as for every other project no matter how philanthropic, rely with confidence upon a discerning and liberal community with a deep interest in the matter to make such pecuniary provisions as the wants of the enterprise may require.

When we consider the expense which the effects of the social evil entail upon the community, which by one estimate I have seen, and believe to be far under the right figure, is set down at over two hundred thousand dollars a year, I think the wisdom of obtaining a remedy far more efficacious at about five thousand dollars, which would amply cover the first year's expenses of this enterprise, will at once be perceived and acknowledged.

For the reasons already given our plan must be a different one from all others, and it would therefore be taking up useful time in vain to review the different European systems; besides, any one interested and anxious to understand them, will find them in full, with comment, in "Dr. Sanger's History of Prostitution," and still more at length in "Pappenheim's Medical Police."

I will then give only an outline of our plan. We propose to appoint district surgeons, to act for and on the responsibility of the Association either at different offices, at one central office, at the different dispensaries, or some other places in this city, during certain hours of the day, professionally to attend *all* that will come to them or send for them, to examine prostitutes and furnish such as are healthy with certificates to that effect, to take measures fully to warn the public and particularly strangers against those without such certificates. All this to be done gratuitously, leaving room for various improvements in details of operation, and for the establishment of a venereal dispensary, or Locke hospital, etc., but always keeping in view the fact that venereal diseases can and must be mitigated, if not eradicated, and that is the primary object of the enterprise.

It may not be amiss here to add as another matter of sanitary importance, that yet another advantage would be gained by such a system. You are all aware of the many impostors and quacks whom the numerous newspaper advertisements, and the many flaring and often obscure bills, which every available spot in the streets is plastered over with, show that our city is infected with. Stimulated by avarice these fellows sit in their dens like a spider in his corner, awaiting their victims whom their puffs attract and whose steps to destruction are accelerated by fear of exposure, and fear for their health, which also blinds them, and prevents their seeing that they had better resort to their trusty family physician, where they would be safer. It is in venereal diseases principally that these fellows dabble, and it is to their ignorance we owe the many evil effects of venereal diseases, the boundary between which and other consequent diseases no man can define. They rob the pocket and injure the constitution of their poor victims, leaving them, as a general thing, much worse than when they first see them. Their occupation will be gone, and one nefarious traffic will have ceased.

Prof. Andrews, writing to the *Chicago Medical Examiner*, from the battle-field at Pittsburgh Landing, says:—"The surgeons showed commendable courage, and, indeed, seem to have exposed their lives unjustifiably, in some cases. One surgeon, whose name I cannot learn, was killed, and six or seven were wounded. Among the latter, was Dr. Frank Reilly, the junior editor of your Journal. He was shot in the leg, fracturing the fibula, while attending to the wounded of the Illinois Lead Mine Regiment, as assistant-surgeon. His wound disabled him from field service, and necessitated sending him home for recovery. Dr. Roskotten, of Peoria, was injured. His horse was shot under him, and falling on his leg, disabled him from field service. He went on board a hospital steamer, and rendered valuable service among the wounded there."

"Suicide in France.—A curious calculation respecting suicides in France has just been published. It shows that the number of suicides committed in France since the beginning of the present century is not less than 300,000."

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, April 2, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. SIMS'S PAPER ON VAGINISMUS.

DR. ALEX. H. STEVENS, in remarking upon the paper, said: "I once had a case of this kind. A lady in consulting me told me that she suffered intolerable agony at every approach of her husband. I asked for an examination, and discovered the existence of a small irritable tumor alongside the meatus urinarius. The question has been with me, whether the disease is not the result of a natural exaggeration of those feelings in females which teach them to dread the first approaches of the male; whether, if the natural means were resorted to—the husband persisting and the wife submitting—the whole trouble would not be at an end."

DR. GRISCOM asked, if, under such circumstances, it would be always necessary to commence the treatment by the administration of anæsthetics?

DR. POST suggested the use of the Greek name for vagina (κολεός), as the term used by Dr. Sims had a Latin termination.

DR. PEASLEE.—Mr. President, I feel for one under very great obligations to Dr. Sims for giving to this disease a distinctive name, and I think the whole profession, so far as they are acquainted with the disease, will feel a similar obligation. In regard to the use of precise terms employed by Dr. Sims, I think the termination indicates the nature of the disease. In regard to the recommendation of the last speaker (Dr. S.), I think that many a woman who has suffered as in the first case related would rather die than have a continuance of the pain. The first case that came under my notice was recognised by mere chance, and occurred some ten years since in a lady who had been married eleven months. In that instance the husband was not wanting in efforts on his part, neither was the wife wantingin patience and endurance on hers—the sexual act, however, was never accomplished. I was applied to for advice, and found the lady in the condition of a "nervous wreck," as Dr. Sims styled it. On examination, I found what I supposed to be a partial occlusion of the vagina by the hymen, and I accordingly proposed an operation for a division of the membrane. It was about the time when ether was commencing to be used for anæsthetic purposes, and the sensitiveness of the parts was so great, that I remarked that I could not perform such an operation without first inducing insensibility. I gave the ether, and to my astonishment found that it was very easy to introduce the finger into the vagina, the former resistance to such an endeavor being now removed. I hence referred the difficulty to spasm of the vagina which was confined to the sphincter muscle. I made use of unguents, among which was one composed principally of extract of belladonna, which seemed to relieve the sufferings to that degree that the sexual act was accomplished after a time. The patient resided in the State of Maine, was under treatment but a short time, and I have not heard anything from her since. Within about five years after I saw another case precisely similar in character, though with less severe symptoms. I may here remark, that I believe cases may be met in which there is every gradation, from the severity of the symptoms in Dr. Sims's first case, down to those in which but slight hindrances to sexual intercourse exist. The case I now refer to was a lady who never had children, who had been married a period of ten years, who had frequently suffered from sexual intercourse, but who some months previous had found the accomplishment of the act impossible without the greatest agony. In that instance, by using an ointment composed of two grains of atropine to ʒj. of lard, I succeeded in overcoming the spasm in about a fortnight. She remained well for two years, when I was again applied to, and the same treatment was available. I have seen quite a number of cases of Vaginismus, and I have been able to relieve all thus far, with the exception of my first case, which I had in charge only a short time. The ointment which I have generally used has been composed of atropine and lard in the proportions mentioned. I of course did not limit myself to the exclusive use of this remedy, but also employed mucilaginous injections, or injections containing extract of hyosciamus. As soon as the disposition to contraction is overcome to that extent as to make it allowable, I make use of a small-sized dilator. I have seen a case of vaginismus within the last fortnight—a lady had been married seven years, but had enjoyed sexual intercourse only about twice. It is possible now to introduce the index finger into the vagina, and in this instance, as in all the cases which I have seen, there is the excessive tenderness of the hymen, or carunculæ myrtiformes, as described by the author of the paper. In conclusion, Dr. P. asked concerning the extent of the incisions made by Dr. Sims.

DR. SIMS.—The incisions I make are more in the form of a ɣ than anything else. I commence first on the right of the middle line, about half an inch above the margin of the sphincter muscle. The sphincter muscle is about half an inch across, and from its edge down to the outlet of the perineal opening where the skin becomes mucous membrane, is very nearly an inch in most women. My incisions meet just below the lower edge of the sphincter muscle, and become one incision down to the outer edge of the skin. In regard to the composition of the term vaginismus, I think there are very many comprehensive words used in medicine which are made up of a mixture of Latin and Greek. However, I care very little by what precise name the disease is called; only it strikes me that the term is a comprehensive one, and that every physician who is not a good classic scholar will not be under the necessity of looking up the meaning of it in his Lexicon. In regard to the application of belladonna—one of my patients had used the ointment for years without any good effect, and the case now under my care, upon which I have not yet operated, has also proved the inefficiency of the remedy. The operation which I propose cures the disease, but the use of the dilator makes the cure permanent.

DR. PEASLEE asked if Dr. Sims cut entirely through the sphincter in each case. Dr. Sims.—I simply cut through the mucous surface, dividing the nerves of the part: I do not now consider it necessary to divide the sphincter. I remember the case of a lady married six years. Sexual intercourse was had, but her sufferings afterwards were so intense that she could hardly sit still. In her case, I removed the hymeneal membrane, dividing the parts through the perineum. She wore the instrument and went home, but although the outlet was clear of thickened membrane, sexual intercourse was just as painful as before. Even the mere touch of a camel's hair pencil was sufficient to give rise to a good deal of suffering. On examination, I found at the orifice of the vaginal outlet a small portion of membrane, about the size of a grain of wheat, which was extremely sensitive. This being seized with a forceps and removed, all trouble was at an end, and sexual intercourse was unattended with any pain. Dr. Clark examined by the microscope many of the membranes removed, and I regret very much that he is not present to give their composition.

DR. PARKER.—Mr. President, the paper read by Dr. Sims is a valuable one, and while it doubtless will be productive of much good to those females whose sufferings demand relief by the knife, I fear that the operation will be resorted to too often. We are too apt to run wild on everything that is new, and if the operation become fashionable, I tremble for the poor females, who are to be the only sufferers from it. Some of the cases termed vaginismus, I am convinced cannot be cured without the knife, but I am

equally well convinced that there are other cases which can be remedied by milder means. I am glad that Dr. Sims made the statement that it was only necessary in operating to divide the mucous membrane, otherwise he might have been understood as advocating the entire section of the sphincter. Some of the cases are doubtless due to a state of hyperæsthesia of the orifice of the vagina; but copulation may be rendered painful, and sexual intercourse may be impossible, simply on account of the existence of the painful tubercle alongside the urethra. I have seen a case which illustrated that point, where the mere removal of the growth, which was not much larger than a flaxseed, was attended with perfect relief. Permit me to draw an analogy between some cases of vaginismus and some diseases of the rectum and urethra. In examining the rectum, we often find it difficult to get in the finger, in consequence of the irritation of the part: especially is this the case when fissure of the anus is present, or when an irritable tumor or ulcer exists near the verge of the orifice. In these latter instances, the hyperæsthesia is secondary. A simple incision through the mucous membrane is generally sufficient to cure the case. We often too succeed in these cases without any operation, by simply introducing a spermaceti candle, smeared with some anodyne ointment, into the rectum at bedtime, allowing it to remain in that situation a little time. By the use of this instrument the fissure will frequently heal up, and the irritability of the sphincter, upon which it depends, entirely disappear. We often see the beneficial results of allowing a bougie to remain some little time in an irritable urethra. How often has a patient been relieved by these means alone!

Now the question suggests itself to me whether this same general principle cannot be applied to many cases of vaginismus, by the use of some of the vaginal pessaries exhibited by Dr. Sims; first etherizing the patient, and then allowing them to remain for some time in contact with the over-sensitive membrane.

Dr. Peaslee remarked that there were two classes of disease of the rectum—one where the spasmodic contraction and hyperæsthesia were due to some disease at or in the neighborhood of the sphincter, and the other where the over-sensitiveness was, so to speak, idiopathic. The same was the case with the vagina. He had seen cases where disease of the os and the small painful tumors gave rise to vaginismus, but that was altogether of a different character from the true vaginismus, as described by Dr. Sims, where no such relation of cause to effect could be made out. He thought it was the duty of every one who had a case, to decide whether or not the vaginismus was dependent upon a sympathetic relation with any disease of the generative organs, and if no such relation could be made out to exist, the operation was called for as the remedy.

Dr. S. P. White remarked, that he had seen a case of vaginismus in East 23d street, which was caused by an irritable excrescence just within the orifice of the urethra. The urethra and vagina were so exceedingly sensitive that the patient would recoil and scream upon the approach of my hand for an examination.

Dr. A. C. Post being called in consultation administered ether, and I snipped off the excrescence with a pair of scissors, following the excision with the application of lunar caustic. The spasmodic constriction of the vagina, however, did not yield until an ointment was used composed of atropine and aconitine; the acrid urine was diluted with alkalies and mucilaginous drinks; the nervous hysterical condition was relieved by anti-nervines; and the patient became pregnant. In the course of a few months she gave birth to a plump boy, and has not complained since.

With respect to spasmodic constriction of the rectum, I have seen it caused by a small irritable ulcer on its edge, opposite the termination of the os coccygis, and which was soon relieved by the application of caustic potash.

Dr. Stone, of New Orleans, has been arrested by Gen. Butler, and confined, heavily ironed, in Fort Jackson.

American Medical Times.

SATURDAY, JUNE 21, 1862.

VENTILATION OF THE SENATE CHAMBER.

Senator Hale has introduced into the Senate of the United States the following resolution:—

"That a committee of three be appointed by the chair, whose duty it shall be to inquire and report to the Senate whether some plan may not be adopted for the ventilation of the Chamber in its present location, or by a reconstruction of the Chamber, by removing the same to the outer walls of the building, so as to render the same more conducive to the health and comfort of those who are required to occupy the same."

In explanation of the resolution, the Senator remarked that the present system of ventilation of the Chamber was the worst that human ingenuity could devise; the air which they breathed was pumped up from a damp and unwholesome place below the surface of the ground, and the ceiling was so constructed as to concentrate the rays of the sun upon their heads, giving to the Chamber the character of a hothouse for raising exotic plants.

As a people, we care little about the ventilation of our private residences, and much less about the ventilation of public edifices. The main object sought is to render a building warm in winter on the most economical principles; and, in general, the means by which this end is attained are as rude as those employed by the savage. The air of the best apartments of private residences is, in general, vitiated, and its sleeping rooms are offensive to the new lodger. In our churches we are careful to provide reclining, softly cushioned seats, where we may enjoy the full influence of the soporific atmosphere of the building. Our school-houses are the nurseries of depraved constitutions, and, in consequence, of a degenerate race. In our courts of law, justice is often stifled by the foul emanations of the unwashed crowd, and, forgetful, inclines her balance. Even the anomalous spectacle is often witnessed of medical men and sanitarians sitting, in grave debate on the sources of human ills, in rooms fragrant with the aroma of their medicated breath and clothing.

We rejoice that the ventilation of public buildings is beginning to attract attention in this country, and that in high places. Our extreme folly in neglecting this most important branch of scientific architecture, is illustrated on a magnificent scale at the National Capitol, and it is here that the reform should commence and pervade all ranks of society. At an enormous expense, Government has extended the wings of the old Capitol, and constructed new halls, for the accommodation of the Representatives. No expense or pains has been spared to give it architectual beauty and completeness, and render it worthy of a great nation. Contemplated in the distance as it rears its massive and yet graceful proportions above all surrounding objects, and forming a pleasing object on which the eye rests as it sweeps over the broad valley of the Potomac, the National Capitol inspires the American citizen, at his first approach, with patriotic pride But what is his disap-

pointment when he enters its halls, to find that utility has been sacrificed to an obsolete style of architecture, and that the only American idea fully realized is a total disregard of ventilation. The first month's session proved that the building was almost untenantable, and that before the building was completed the work of reconstruction must be commenced.

Senator Hale has entered upon this inquiry with, apparently, a full appreciation of its importance, and a determination to find a remedy. We beg to make a few suggestions to the Committee which may facilitate their investigations, and lead to practical results.

This is not the first time that a National Capitol building has been reconstructed for the simple purpose of improving its ventilation. The old Parliament building was so deficient in ventilation, that an eminent writer of the time states that he would not endure the smothering to which members were subjected for any consideration. No real improvement, however, was made until Dr. David B. Reid, of Edinburgh, now of this country, developed his system of ventilation, based on the laws of physics, and practically demonstrated its utility in a large school-room.

Dr. Reid was invited to apply his method in the House of Commons. Of the special plans employed we will only state that the fresh air was derived, as far as possible, from uncontaminated sources; it was washed, screened, and treated with chemicals, when loaded with noxious emanations, or soot; the drains and sewers in the vicinity were deprived of offensive gases and vapors; the ground in the vicinity exhaling offensive smells was deodorized with chemicals; the temperature, moisture, and movement of the air in the House were adapted to the weather, and attendance, by a power that could give one foot or fifty thousand cubic feet, or any intermediate proportion of air, at pleasure, in a minute according to necessity; the air vitiated in the lower part of the House did not ascend and contaminate the galleries, or *vice versâ*, the supply to each being separate; the products of respiration, and of the combustion of lamps and candles, were all removed at once and not permitted to return. During the fifteen years that this system was in operation—1836–51—the windows were not opened on a single occasion.

Of the success of Dr. Reid's plans of ventilation we have the most satisfactory evidence. Lord Sudley said:—"The ventilation of the House of Commons was complete and perfect—and the first plan of systematic ventilation ever carried out in this or any other country." "To the skill, zeal, and determination of Dr. Reid, it is owing that the members of the House of Commons can now pursue their senatorial duties without a sacrifice of their health or comfort." Sir B. Hawes said:—"You have facilitated public business, and prolonged the lives of public men." Sir James Clarke stated that "Dr. Reid's success in the Houses of Parliament, and similar efforts in the same direction, would do more to improve the public health than any measure with which he was acquainted." Dr. Neil Arnott, in his evidence before the House of Commons' Committee, said:—"Until the late House of Commons existed as ventilated by Dr. Reid, there was never in the world a room in which five hundred persons or more could sit for ten hours in the day, and day after day, for long periods, not only with perfect security to health, but with singular comfort."

We call the attention of the Committee to these facts, for the purpose of showing that the ventilation of public Assembly buildings is no longer a matter of mere conjecture, but is reduced to a system as perfect and practicable as can be attained by the study of the laws of the physical sciences. Nor should they look to architects and mechanics for a correct knowledge of ventilation; it takes rank among a higher class of studies, being practically understood only by the student of the chemico-physical sciences. In the hands of the architect, ventilation is always sacrificed to the merest whim of taste, as a matter of secondary importance Of this we have a melancholy example in the erection of the new House of Parliament. So essential was Dr. Reid's plan of ventilation considered that he was associated with the architect in the erection of the buildings. But a conflict of opinions soon commenced, the architect refusing to carry out the plans of Dr. Reid, as they interfered with his own, and, as a result, the full perfection of his system of ventilation was not realized. Already, as Senator Hale informs us, the question of an improved ventilation of the Senate Chamber has been submitted to the gentleman who has charge of the extension—Captain, now General Franklin. We can positively assure the Committee that in such hands their scheme of improved ventilation will fail of success.

Let the Committee then summon to its aid men who have given to this subject the study it merits, who are experts in chemical and physical sciences. Or, what would realize the same result, let them offer a large premium for the best plan of ventilating the Senate Chamber, the award to be made by a Scientific Commission. We have among us those who would cheerfully respond to such an invitation, and who are thoroughly qualified to furnish plans for the effectual ventilation of the Capitol building. When a plan is selected let the Committee see that it is thoroughly applied, and that no architect perverts its details by architectural refinements.

THE WEEK.

The Eclectics of Philadelphia carry their system of appropriating the labors of others to their own benefit into literature as well as medicine. Professor B. F. Paine, M.D., who, it appears from the announcement of the Eclectic Medical College of that city, "brings to his department a thorough knowledge of his subject, acquired by close study," has given evidence of his extensive reading by publishing in the *Eclectic Medical Journal*, an original lecture on abortion, the greater portion of which is copied, without acknowledgment, verbatim, from Prof. Bedford's recent work on the *Principles and Practice of Obstetrics*. Plagiarism in an Eclectic must be a virtue, and we can but commend the Professor for adhering to his creed in the face of a scornful and fault-finding world.

—

The daily expectation of a great battle near Richmond, and the consequent demand for hospital accommodations, continues to stimulate the authorities in their efforts to meet the emergency. The churches of Washington and Alexandria have been seized, and a demand has been made upon this city for enlarged provision for the wounded. We must repeat the suggestion of last week, that the wounded should be distributed more widely at the North. Washington is as unfit for hospitals as a place can be made by the accumulation of the materies morbi, and the same is true of Alexandria and Yorktown. The sick can be transported

to Portland as easily and safely as to Washington, if our transport system was thoroughly organized, and supplied with competent officers and nurses. At some points, as at Albany, in this State, large and well located hospitals, prepared for this emergency, stand vacant, and with open doors ready to receive the sick, while citizens and surgeons are prepared to bestow upon them every care and attention. It is folly to herd the sick in large cities when such distribution can easily be made.

—

The following order has appeared from the War Department:—

War Department, Adjutant General's Office, Washington, *June* 16, 1862.

General Orders, No. 66.—Surgeon David S. Hays, 110th Regiment Pennsylvania Volunteers, having been ordered to conduct to this city a large detachment of sick and wounded men, and having shamefully neglected them after their arrival, the President directs that for this gross dereliction of duty he be dismissed from the service, and he is hereby accordingly dismissed.

By order of the Secretary of War,

L. Thomas, *Adjutant-General.*

Official: E. D. Townsend, *Assistant Adjutant-General.*

It appears that Surgeon D. L. Hays, of the 110th Pennsylvania, accompanied to Washiugton upwards of three hundred wounded soldiers from Gen. Shields's Division, and left them in the cars over Saturday night, while he himself went to bed at Willard's. He admitted these facts when called before the Secretary of War, but pleaded that he had vainly sought to find any official in Washington to tell him what disposition to make of the wounded. It is stated in the newspaper reports that the "Secretary having heard him through, said, in a tone calculated to impress his hearer: 'That a man who could be guilty of such inhumanity was a disgrace to the army and the country, and should be forthwith dismissed from the service, and advised him to leave the room and the department instantly.' Had he not done so his movements would have been accelerated by the throng in attendance at the department, whose verdict was that the Secretary had served him right. The friends of Dr. Hays claim that he was no more to blame than officials here, who, although advised that the train was to arrive, were not present to direct him what to do with the soldiers. But the truth is that the telegram to this effect, if sent, failed to arrive, in consequence of the storm, and neither the Surgeon-General nor any of his subordinates here was apprised of the arrival of the soldiers, nor can any defence relieve Dr. Hays from the charge that he provided himself with a comfortable bed, while leaving the soldiers boxed up in the cars without food or attendance. The Surgeon-General, in a note to the Secretary of War, desired him to make an example of this man as a warning to others."

—

The Act re-organizing the Medical Department of the Army provides for the appointment of eight Sanitary Inspectors, whose special duty would be to visit the camps and hospitals and supervise their sanitary condition. These appointments have been delayed, to the great detriment of the army. The nominations have finally been made, and the Senate has acted upon them. So far as announced, the following gentlemen have been selected, viz. Dr. John M. Cuyler, Surgeon, U.S.A.; Dr. Richard H. Coolidge, Surgeon, U.S.A.; Dr. Edward P. Voldeum, Assistant Surgeon, U.S.A.; Dr. Geo. H. Lyman, Geo. F. Allen, and W. H. Mussey, Brigade Surgeons, U.S.A.

Reviews.

Hand-Book of Surgical Operations. By Stephen Smith, M.D., Surgeon of Bellevue Hospital. New York: Bailliere Brothers, 440 Broadway.

During the past year medical men from all parts of our country, impelled by motives of patriotism and benevolence, have rushed to the army to secure positions as regimental surgeons or assistants. Many, having availed themselves of the advantages derived from hospital practice, are, no doubt, qualified to perform the duties incumbent upon them; while others, although intelligent and well educated, from lack of opportunity, are not familiar with surgical practice, particularly the performing of operations. Yet we must have surgeons in our army. In a gigantic war like the present, coming upon us so suddenly too, and making such large demands upon the profession, it is not to be expected that all can be fully competent, or that every regiment can have an accomplished and skilful surgeon. There is, however, no excuse for those who, in assuming these duties, neglect to avail themselves of every opportunity to become acquainted with the details of surgical practice. The standard treatises on surgery are, for the most part, thorough and complete, full of information, and embrace every topic in the range of surgical science. As text-books and works of reference they are invaluable, and should be carefully studied; but they are not always accessible to the army surgeon, and from their bulk and comprehensiveness are inconvenient to consult at all times. The same may be said of many of the works on military surgery.

What has, therefore, been a desideratum, is an abridged work on practical surgery, a portable compendium of surgical operations, and the methods of performing them, systematically arranged and fully illustrated; not only adapted to the general practitioner, but especially to the wants of the military surgeon:—and such is the book under consideration.

It is a neat volume of 280 pages, containing over 200 engravings. As its name indicates, it is a manual of convenient size, containing a clear and accurate description of the different modes of procedure in those important operations which come under the observation of army surgeons particularly, and many useful and practical hints in the treatment of surgical troubles resulting from military and naval warfare.

Dr. Smith has, with great industry, availed himself of the works of distinguished surgical writers, and has given us, in his little volume, an excellent *resumé* of their labors and experience.

The order of subjects treated is as follows:—

Under the head of Minor Surgery, we have in the first chapter, an article on instruments, on union of wounds, bandages, dressings, hæmorrhage, blood-letting, counter-irritants, vaccination, and anæsthetics. The other chapters are on wounds of arteries, with a description of all the arteries ever ligated; on veins, on amputations, resections, gunshot wounds, and secondary hæmorrhage, with an index alphabetically arranged, with order and exactness, a necessary part of a book like this.

The chapter on Resections is one of the best in the book, and includes the substance of everything known or written on this interesting branch, and is admirably illustrated by the engravings, not only of the instruments used, but the different steps of each operation.

The chapter on gunshot wounds, taken from Prof. Longmore's article, is clearly compressed into a set of aphorisms of great practical importance, and will be read with interest.

The entire work must commend itself, on account of its method, accuracy, perspicuity, and conciseness.

C. D. S.

HINTS AND OBSERVATIONS ON MILITARY HYGIENE; with the best means of Treating the Medical and Surgical Diseases of the Army. By LAWRENCE TURNBULL, M.D., one of the Surgeons of Howard Hospital. (Reprinted from the Medical and Surgical Reporter.) Philadelphia, 1862. Pp. 62.

THIS pamphlet consists of a series of articles published during the last few months in our Philadelphia contemporary. A large range of subjects relating to military medicine and surgery are discussed, with ample illustrations from authorities. We have read no running commentaries on military medicine with more interest or profit than the papers of DR. TURNBULL; they evince, not only great familiarity with the literature of the subject, but also that practical good sense which at this time is greatly needed on the field. We should be glad to see this publication largely circulated among the surgeons of the army.

ON BANDAGING AND OTHER OPERATIONS OF MINOR SURGERY. By F. N. SARGENT, M.D., Member of the College of Physicians of Philadelphia, etc., etc. New Edition, with an additional Chapter on Military Surgery. By W. F. ATLER, M.D. With one hundred and eighty-seven Illustrations. Philadelphia: Blanchard & Lea. 1862.

THE present edition is improved by a short chapter on military surgery. The work is too well known to the profession to require commendation at our hands.

Correspondence.

DR. BENNETT'S CASE OF RESECTION.

BRIDGEPORT, June 16th, 1862.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—I observe in your issue of the 14th June inst., that a correspondent under the head of "Connecticut Med. Society," in speaking of my case of resection of the head of the humerus, for an enchondromatous tumor, represents me as expressing the opinion "that the operation was unique." The writer mistook my meaning. I simply stated that I could not learn that I had been anticipated by any surgeon *in this country*, in a resection of the head of the humerus for a disease of this nature, which I still believe to be the fact. I do not choose at this time to report the case in detail, designing to do this at a later date, but will merely state that the length of bone removed was five and a half inches, including the head, the tumor measuring thirteen inches in its largest circumference (taking the direction of the circumference of the humerus), and involving the bone from the neck to within half an inch of the point at which it was sawed off. I have been informed by Professor Geo. C. Blackman of Cincinnati, whose knowledge of the literature of surgery I believe to be equal to that of any gentleman in this country, that he is at present aware of but four cases of an analogous character, recorded by European surgeons, viz. one each by Syme, Roux, I. Hutchinson, and Bickersteth. My patient is at this date, four months after the operation, in excellent health, and has a very useful arm.

Yours, etc., H. N. BENNETT.

MEDICAL COLLEGE OF OHIO.

[To the Editor of the AMERICAN MEDICAL TIMES.]

CINCINNATI, May 29, 1862.

AT a meeting of the students of the Ohio Medical College, regularly called, the following resolutions were offered and *unanimously* adopted:

Resolved,—That the thanks of the students, now in attendance at the Ohio Medical College, are due and hereby tendered to Brigade Surgeon H. S. HEWITT, late Medical Director of the department of West Tennessee, for his very interesting and valuable lectures upon military surgery delivered before the class in the absence of PROF. BLACKMAN.

Resolved,—That a copy of these resolutions be signed by the Chairman and Secretary of this meeting, and that the same be delivered to DR. HEWITT by a committee appointed for that purpose; also, that a copy be sent to the *Lancet* and *Observer* and the AMERICAN MEDICAL TIMES, with the request that it be published.

J. SYKES ELY, *Chairman*.

GEO. E. SMITH, *Secretary*.

FOREIGN CORRESPONDENCE.

BY PROF. CHARLES A. LEE.

LONDON, June 1, 1862.

IT is not my design to report individual cases, which I may observe in my visits to the different hospitals. The most interesting of these are regularly reported in the London *Lancet* and *Medical Times*, and can be copied into your pages, if thought desirable.

The London surgeons operate more fearlessly, and with more rapidity than ours do on our side of the Atlantic: but I very much doubt whether more successfully, except in particular cases. Thus I saw Mr. Ferguson operate for double cleft palate last week, and the operation was completed in fifteen minutes. He afterwards informed me that the average duration of the operation of staphyloraphy in his hands was ten minutes, and that out of one hundred and five cases, he had met with complete success in one hundred and two. This must be admitted to be extraordinary activity and marvellous success. But much of this success is owing to previous frequent manipulations by the finger of the patient, or a tooth brush, of the fauces and parts adjacent, and to the very free separation of the velum palati from the bone, so as to allow great distension. The profession is indebted to Mr. F. for this practice, which he introduced many years ago, but which has recently been claimed by another surgeon as having originated with him. In the removal of scirrhous breasts, which I have seen done by Mr. Paget, Mr. Skey, and Mr. Ferguson, I think the average time employed in the operation was not over two minutes, although in every case chloroform was given, and generally by an inhaler, which admits freely the atmospheric air. One great advantage attending this mode, is that we can regulate exactly the quantity administered: usually from twenty to thirty drops are introduced, and it is rarely necessary to use any more. This shows, at least, how much our surgeons are in the habit of wasting, in their mode of administering it on a sponge or napkin, and by the way. I may mention that a death from chloroform has occurred near my lodgings within the last few days under the following circumstances: The patient was laboring under fistula. Chloroform was given on a napkin. It appearing to take no effect, more chloroform was poured on, and this was repeated twice. On the third application the patient turned over, and immediately ceased to breathe. All attempts to restore respiration failed. Autopsy showed that the walls of the heart were very thin, and the cavities dilated, with great insufficiency of both mitral and tricuspid valves. There was also fatty degeneration of the organ. Both lungs were strongly adherent to the chest. Throughout the greater portions of their extent, Dr. Gant, of the Royal College of Surgeons, testified on the inquest, that owing to this diseased and enfeebled state of the heart, and to the lungs being incapable of expanding from the extensive adhesions, they necessarily failed under the influence of chloroform, and death resulted instantaneously from paralysis of the heart. I think the case goes far to show that the condition of these organs should be correctly ascertained, if possible, before we venture to give this powerful agent.

I have said that British surgeons operate with more celerity, but perhaps not more success than American surgeons. If I wanted proof of this I might quote lithotomy statistics. According to Mr. Bryant (London *Lancet*, May 3d, p. 459) at Guy's Hospital, fifty-seven per cent. of patients above the age of forty, who have been operated on for stone, have died, and the gross result of lithotomy in the provinces is about the same as at Guy's. There are, however, instances where the mortality is not so great.

Thus in the Norfolk and Norwich hospitals, only twenty-three per cent. of patients above the age of forty have died after lithotomy. But if any one will compare these results with those of American surgeons, as recorded in Gross's Surgery, he will find that the percentage of deaths is far greater than with us. Indeed, one of the most distinguished operators for stone in London told me, that he believed the fatality of this operation in Great Britain was as great at the present time as it was one hundred years ago!

I am very glad to find that in the ophthalmic hospitals in London and the provinces, as well as in the military hospitals, as at Chatham, the *ophthalmoscope* is in general use and highly appreciated. In no branch of our art have I seen such decided improvement within the last twelve years, since I was here, as in ophthalmic surgery; and much of this progress is owing to our being able to explore the deep textures of the eye by the ophthalmoscope. This admirable instrument was nearly perfect, when introduced a few years ago by Helmholz; and now there is but one opinion as to its effectiveness, and to its immense importance, in enabling us to investigate diseases, especially of an obscure nature, in this delicate organ. And what surprises me, is to see the degree of tolerance of such examinations, in almost every kind of ophthalmic disease; a result we certainly should not have looked for *à priori*. Temporary dimness of vision may in some cases be induced by its use; but by a proper regulation of the quantity of light admitted into the eye, we may employ it with advantage in acute glaucoma, or even in retinitis. A metallic speculum is now preferred for the instrument instead of glass, as it is more portable and less brittle, has a small, thin-edged sight hole, and but one reflecting surface. Besides, a metal reflector always gives a clearer and better-defined image than a glass one. It is true that some experience is necessary to enable one to derive all the advantages from this instrument of which it is capable; but the same may be said of the stethoscope or any other instrument. *The division of the ciliary muscle* of the eye for glaucoma, opacity of cornea, etc., may also be mentioned, as evidence of progress in the treatment of this class of diseases. This operation I saw performed several times, and very skilfully, by Mr. Hancock of the "Royal Westminster Ophthalmic Hospital," and with decided benefit. Thus, out of 511 principal operations performed at this institution during the last year, I find that this operation has been resorted to in 118 cases. Of a variety of affections, about 1000 patients are here annually treated, and there is no better place for students to study this class of diseases.

Mr. Czermak, of Prague, the inventor of the *Largngoscope*, has been in London recently, and showing upon himself how readily and successfully the instrument may be used. Mr. Paget speaks favorably of it, but doubts whether it can be successfully introduced into practice. It is something like injecting the bronchial tubes—very easy to describe, and very difficult to accomplish. Mr. Czermak showed, as long ago as 1859, that it was possible, by the aid of his laryngoscope, to apply local cauterizations in the larynx and the naso-pharyngeal cavity; but the same can be done without. But then, how can we ascertain whether there is disease enough in these parts to require local treatment? In some cases, probably, we cannot, but as a general rule, I think we can. The rational signs, in such cases, are generally pretty clear and decided; I know that we have reports that polypi of the larynx have, in two cases, at least, been removed by the aid of this instrument. But, as Mr. Paget remarked to me, it must always be a very difficult operation, inasmuch as the image is reversed, and every one knows how very difficult it must be to operate under such circumstances. Here, we have to introduce the laryngoscope with one hand, and keep it immovable in such a position and inclination, as to reflect the desired image, while with the other, holding a suitable instrument, we proceed to operate. But the difficulty I have named is so great, that it would require a constant practice, and for a considerable time, to enable a surgeon to attain even a moderate degree of success in the use of the instrument. Owing to these causes the laryngoscope has been, as yet, very little used in this metropolis, and I may very safely predict that it will be a long time before it will be. The inventor, however, is a very talented and ingenious surgeon, and certainly deserves, if he does not meet with, great success. That scientific merit, sooner or later, meets its just reward, I may mention the splendid and unprecedented success, which has attended the career of our friend, Dr. Brown-Sequard, since he came to this city. In no instance has great professional success created less envy, inasmuch as all cheerfully acknowledge that it has been fairly earned. As the head of the great "National Hospital for the Paralysed and Epileptic," instituted by the Lord Mayor, at the Mansion House, Nov. 2, 1859, and under his presidency, and supported mainly by the nobility, Dr. Sequard has found a theatre worthy of his science and his skill; and with considerable success, which has attended his efforts, demonstrates the soundness of the physiological and pathological views he has inculcated in his various writings and lectures. This success, moreover, has, as its fair and legitimate consequence, introduced him into the largest practice, in the greater class of nervous affections, of any practitioner in England. The out-patients of his hospital number at this time over 800, while his private patients are so numerous as to occupy every moment of his time. He is called on, daily, by patients from almost every part of Great Britain, and no small portion of them belong to the class of the nobility. Surely, such an example as this may well be held up to the younger members of our profession, to show them that industry, perseverance, energy, and real merit, will sooner or later meet its due reward. I may also mention, by way of example, that since Brown-Sequard commenced his scientific investigations he has never attended a place of amusement, or allowed anything to draw off his mind and attention from his pursuits; and although he resided in Paris, at the time of the great International Exhibition, and daily passed by the building, he never entered it, and has no idea, to this day, what there was in it.

Medical News.

Increased Hospital Accommodations—New Point Comfort.—Dr. Cuyler is making arrangements to enlarge the hospital accommodations here, besides the new general hospital at Newport News. Dr. C. will, in a few days, proceed to New Point Comfort, mouth of the Potomac, with the view of occupying the large hotel and cottages there, which will materially increase the hospital accommodations in this vicinity. The salubrity of the location and extensive character of the buildings there, are much in favor of the selection.

Surgeons and Nurses.—The demand is and will continue to be for competent surgeons and nurses. They are wanted not temporarily but permanently. New surgeons offering their services should do it with this reference. If volunteers cannot be obtained, Dr. Cuyler is prepared to hire competent surgeons, who will be expected to engage themselves as long as their services are required.

By a recent Act of Congress the rank of Brigade Surgeon is abolished, and this class of medical officers are subject to the same rules which govern surgeons. The Corps of Surgeons is also to be enlarged by the appointment of one hundred and sixty more for the war, forty being full Surgeons, and the remainder Assistant Surgeons.

At the Annual Meeting of the Medical Society of the State of Pennsylvania, held in Philadelphia, a committee was appointed to inquire as to the expediency of publishing a Daily Medical Gazette.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 8th day of June to the 15th day of June, 1862.

Deaths.—Men, 78; women, 73; boys, 105; girls, 79—total, 335. Adults, 151; children, 184; males, 183; females, 152; colored, 4. Infants under two years of age, 109. Children reported of native parents, 28; foreign, 186.

Among the causes of death we notice:—Apoplexy, 7; infantile convulsions, 22; croup, 6; diphtheria, 6; scarlet fever, 20; typhus and typhoid fevers, 16; consumption, 45; small-pox, 3; dropsy of head, 13; infantile marasmus, 19; cholera infantum, 2; inflammation of brain, 9; of bowels, 5; of lungs, 16; bronchitis, 2; congestion of brain, 10; of lungs, 4; erysipelas, 2; whooping cough, 9; measles, 1. 178 deaths occurred from acute diseases, and 35 from violent causes. 217 were native, and 118 foreign; of whom 76 came from Ireland; 46 died in the City Charities; of whom 10 were in the Bellevue Hospital.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

June 1862	Barometer.		Temperature.			Difference of dry and wet bulb. Thrm.		Wind.	Mean amount of cloud.	Humidity. Saturation, 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In.	°	°	°	°	°			
8th.	29.92	.20	55	50	60	5	8	NE. to S.	9	726
9th.	30.10	.17	59	48	70	8	12	NE. to S.	4	533
10th.	30.00	.15	62	54	73	6	12	NE. to S.	4	660
11th.	29.90	.11	64	54	74	7	13	NE. to S W	7	610
12th.	29.70	.10	72	60	88	9	15	N. to S.	2	590
13th.	29.70	.08	78	70	86	9	15	W. to S.	4	610
14th.	29.80	.10	78	70	86	9	16	S.W.	4	610

REMARKS.—8th. Rain, A.M.; fresh wind, P.M. 9th. Variable, A.M ; clear' P.M. 10th, Clear, A.M.; fresh wind afternoon, with light rain; thunder shower, late P.M. 11th, Variable, shower P.M. 12th. Sultry. 13th, sultry, thunder storms at 4 and 6 P.M. 14th, Sultry, showers during the evening.

SPECIAL NOTICES.

SECTION OF SURGERY AND SURGICAL PATHOLOGY.—*The Stated Monthly Meeting of the Section of Surgery and Surgical Pathology, will be held at the house of the Chairman,* DR. JAMES R. WOOD, *No. 2 Irving Place, on Friday evening, the 27th inst., at 8 o'clock. Subject for discussion, "Tracheotomy in Cynanche Trachealis."*

DR. JULIUS HOMBERGER,
Specialty: Diseases of the Eye,
has removed to
24 West 12th Street.
OFFICE HOURS: { From 9—11 A.M. " 5—6 P.M.

John W. Shedden, Apothecary,
363 Bowery, cor. 4th St.
Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

L. Lyons' Pure Ohio Catawba Brandy.—The undersigned beg leave to inform the public, that they have established a DEPOT IN NEW YORK for the purpose of supplying the Trade at their Cincinnati prices.
All orders promptly attended to by
G. FRANCHERE & CO., No. 12 Broadway,
SOLE AGENTS.

[COPY.]

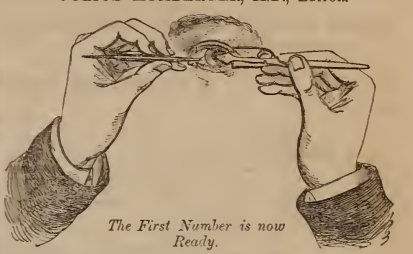
NEW YORK, April 2, 1862.

We have recently made a careful analysis of Lyons' Catawba Brandy for Messrs. G. Franchere & Co., of this city, from Samples taken by ourselves of 357 cases, and have found it to be a perfectly pure article without any foreign admixture. We, therefore, have no hesitation in recommending it to the public, as fulfilling all the requirements of a pure Brandy for Medical and other uses.
JAMES R. CHILTON & CO., *Analytical Chemists.*

To prevent imposition, the labels on the genuine article have the Certificate of Dr. Hayes of Boston, printed on them. *None Genuine without it.*,
SAMUELS & JACOB, PROPRIETORS,
85 Columbia Street, *Cincinnati.*

Wm. H. Davol, M.D., late Physician to L. I. College Hospital, Brooklyn, removed to St. Paul, Minn.
References.—C. L. Mitchell, M.D., T. L. Mason, M.D., Prof. E. N. Chapman, M.D., of Brooklyn; Prof. Austin Flint, M.D., Prof. B. F. Barker M.D., of New York.

American Journal of Ophthalmology
JULIUS HOMBERGER, M.D., EDITOR.



The First Number is now Ready.

Subscription Price for one year (six numbers), $2.00; sample numbers 25 cents.
BAILLIERE BROTHERS,
440 Broadway, New York.

Medical Storekeepers.—The following extract of an Act of Congress in relation to the appointment of Medical Storekeepers is published for the information of persons desirous of applying for such a position:

AN ACT to authorize the appointment of medical storekeepers and chaplains of hospitals.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of War be authorized to add to the medical department of the army medical storekeepers, not exceeding six in number, who shall have the pay and emoluments of military storekeepers in the quartermaster's department, who shall be skilled apothecaries or druggists, who shall give the bond and security required by existing laws for military storekeepers in the quartermaster's department, and who shall be stationed at such points as the necessities of the army may require: *Provided*, That the provisions of this act shall remain in force only during the continuance of the present rebellion. Approved, May 20, 1862.

II. The following are the regulations which will govern the appointment of medical storekeepers under the first section of the foregoing Act of Congress:

1. A board of not less than three medical officers will be assembled by the Secretary of War, to examine such applicants as may, by him, be authorized to appear before it.

2. Candidates to be eligible to examination, shall be not less than twenty-five years nor more than forty years of age; shall possess sufficient physical ability to perform their duties satisfactorily; and shall present with their applications satisfactory evidence of good moral character.

3. Candidates will be required to pass a satisfactory examination in the ordinary branches of a good English education, in pharmacy and materia medica; and to give proof that they possess the requisite business qualifications for the position.

4. The board will report to the Secretary of War the relative merit of the candidates examined, and they will receive appointments accordingly.

5. When appointed, each medical storekeeper will be required to give a bond in the amount of $40,000 before he shall be allowed to enter on the performance of his duties.

By order of the Secretary of War:
L. THOMAS, ADJUTANT GENERAL.

A Board of Medical Officers for the examination of applicants will be convened in the city of Washington on the first day of July, to continue in session one month.

Applications to appear before the Board should be addressed to the Secretary of War.
Surgeon-General's Office, June 5, 1862.

Sent Free by Mail on Receipt of Price.

Consumption, its Early and Remediable Stages. By Edwards Smith, M.D. 8vo. London, 1862. $3.25.
BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Gmelin (L.) Hand-Book of Chemistry.
Vol. I. 2d Edition, revised. 8vo. London, 1861. $3.25.
BAILLIERE BROTHERS, 440 Broadway, N. Y.

Sent Free by Mail on Receipt of Price.

Epilepsy: its Symptoms, Treatment, and Relation to other Chronic Convulsive Diseases, by J. R. Reynolds, M.D. London. $3.25.
BAILLIERE BROTHERS, 440 Broadway, N. Y.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians (principally country Physicians) Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine which have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonaparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bourbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA, *FOR NERVOUS AFFECTIONS.*

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyoscianus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Record says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

AMERICAN MEDICAL TIMES

Being a Weekly Series of the New York Journal of Medicine.

No. XXVI. } New Series. NEW YORK: SATURDAY, JUNE 28, 1862. { *Mail Subscribers, $3 per Ann.*
Vol. IV. } *City and Canadian, 3 50 "*
Single Numbers, 10 cents.

ORIGINAL LECTURE. — Page
Course of Lectures on Dentition and its Derangements. Delivered at the N. Y. Med. Col. and Charity Hosp. in the Preliminary Course, Session 1860-1. By A. Jacobi, M.D., etc. Lecture IX.—Part II. 353

ORIGINAL COMMUNICATIONS.
Sulphuric Ether as an Anæsthetic in Military Surgery. By Frederic D. Lente, M.D. . . 356
Is Iridectomy a New or Old Operation. By John O'Reilly, M.D., F.R.C.S.I. 356

REPORTS OF SOCIETIES.
Surgical Section:
New York Academy of Medicine. Stated Meeting, April 25, 1862. Dr. Jas. R. Wood. Chairman. Discussion on Tracheotomy in Croup. . . 358

EDITORIAL ARTICLES.
Medical and Surgical History of the Rebellion. 358

The Week:
Medical Director of the Army of the Potomac. 359
The Retirement of Dr. Tripler. 359
Law against Swill Milk . . . 360

ARMY MEDICAL INTELLIGENCE.
Letter from the Surgeon-General to Surgeon Letterman. . . 360

Index. 361

Meteorology and Necrology of the Week in the City and County of New York.

Special Notices.

Piercy's Pile Pipe.

An entirely new Invention, recently devised for the convenient and perfect application of Curative, Sedative, and Lubricating Ointment to the lower portion of the rectum. It is

SIMPLE, CLEANLY AND EFFECTIVE,

and its introduction is unattended with *Pain;* it is not easily broken, and can never get out of order. It is of such a size as to be conveniently carried in the *pocket*, and can be charged with sufficient ointment for several applications, a fact of much importance to *travellers*. It has met with the entire approbation of every physician to whom it has been submitted. Physicians are requested to call at the agent's office and examine the article.

To be had of all Druggists.

THOMAS W. BEACH, Sole Agent,
36 Beekman, corner of William St., N. Y.

Now ready in convenient pocket form, 12*mo.*, 280 *pages and* 257 *Woodcut Illustrations. Price* $1.75. *Sent free by mail on receipt of price.*

HAND-BOOK
OF
SURGICAL OPERATIONS.
BY
STEPHEN SMITH, M.D.,
SURGEON TO BELLEVUE HOSPITAL.

This work gives the details of the more common as well as the important operations in Surgery. It is particularly adapted to the wants of the Army Surgeon, and would be found useful both by the practitioner and student.

CONTENTS.

Chapter I.—MINOR SURGERY—Instruments, Union of Wounds, Dressings, Hæmorrhages, Blood-Letting, Counter-Irritants, Vaccination, Anæsthetics.
Chapter II.—ON THE ARTERIES—Wounds of Arteries, Ligature of Arteries, Arteries of the Upper Extremities, Arteries of the Neck and Head, Arteries of the Lower Extremities.
Chapter III.—ON THE VEINS—Wounds, Varicose Veins.
Chapter IV.—ON AMPUTATIONS—Amputations in general, Amputation of the Upper Extremities, Amputation of the Lower Extremities.
Chapter V.—ON RESECTIONS—Resections in general, Resections of the Upper Extremities, Resections of the Lower Extremities, Resections of the Trunk, Resections of the Bones of the Face, Resections of the Bones of the Cranium.
Chapter VI.—ON GUNSHOT WOUNDS—Gunshot Wounds in General, Gunshot Wounds in Special Regions of the Body, Gunshot Wounds of the Extremities, Amputations, Secondary Hæmorrhage.

Just published, same form as the above, 12*mo.*, 260 *pages. Price* $1.25. *Free by mail on receipt of the price.*

ON MILITARY AND CAMP HOSPITALS,
AND THE
HEALTH OF TROOPS IN THE FIELD.
BY L. BAUDENS,
MEDICAL INSPECTOR OF THE FRENCH ARMY, ETC., ETC.

Translated and Annotated by FRANKLIN B. HOUGH, M.D.,
LATE SANITARY INSPECTOR IN THE ARMY OF THE POTOMAC.

*** The above work is the result of a commission sent by the French Government to the Crimea to report upon the condition of the Hospitals and troops of the French army, and incidentally of the English and Sardinian armies. It is written in the form of a narrative, and the great questions of *the prevention and control of disease in camps and hospitals* are thoroughly discussed. The hygienic conditions of the United States Army are similar to those of the armies of the Crimea; the rules and prescriptions given in the book will, therefore, be found perfectly applicable. This work recommends itself to commanders of regiments as well as army surgeons.

A Practical Treatise on the Ætiology,

Pathology, and Treatment of the Congenital Malformations of the Rectum and Anus. By W. Bodenhamer, M.D. 368 pages. 8vo. 16 Plates. $2.00. S. S. & W. Wood, 61 Walker St., New York.

NOTICES OF THE PRESS.

"We cordially recommend this work to the profession."—*Savannah Journal of Medicine.*

"Must be considered by far the most valuable, if not the only, text-book on this subject."—*Boston Medical and Surgical Journal.*

"Is the most complete work of the kind that has ever been published."—*Medical Journal of North Carolina.*

"The different malformations are abundantly illustrated by lithographic plates of exquisite execution, and their treatment exemplified by nearly three hundred reported cases."—*Eclectic Medical Journal.*

"To the practitioner who desires to be prepared for every emergency, we commend this volume as an indispensable addition to his library."—*American Medical Times.*

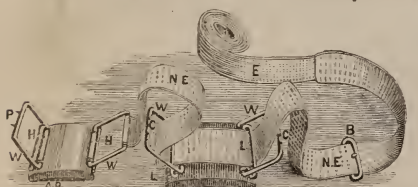
"This is a most valuable monograph on subjects upon which little knowledge is to be derived from our surgical books. The author appears to have fully elaborated and exhausted the subject, having collected from all sources nearly three hundred cases, and illustrated the most remarkable by sixteen plates, which are well executed, and render the volume an attractive and useful one."—*American Medical Gazette.*

Wm. Bodenhamer, M.D. Office

854 Broadway, New York.

Office hours from 9 o'clock A.M. to 4 o'clock P.M. daily.

LAMBERT'S NEW ELASTIC TOURNIQUET.



This improved Tourniquet is now offered to the Profession. It has received the unqualified approval, so far as we can learn, of all Surgeons in this country and in Europe before whom it has been presented.

It is easily applied, allows, when desirable, the "collateral circulation," and is very compact and portable.

Price $2.

Send for a Circular of description and commendations.

WADE & FORD,
Sole Agents, NEW YORK.

IS YOUR LIFE INSURED?

New England Mutual Life Ins. Co.

OF BOSTON AND NEW YORK.

Accumulated Capital; Two Millions One Hundred Thousand Dollars. Surplus over Liabilities: One Million Dollars.

The business of the Company is wound up every fifth year, and all the surplus returned to the policy holders. Last CASH dividend paid them 89 per cent.

New members have equal advantages with the old.

This is an institution strictly for mutual protection, and entirely beneficent in all its workings and tendencies. It is the oldest PURELY MUTUAL Company in the United States, and has been uniformly successful. The Insurance Commissioners class it as the leading Company in the country, in its surplus and economy.

Terms of payment of premiums as accommodating as it is possible and proper to make them.

WILLARD PHILLIPS, PRES'T. B. F. STEVENS, SEC'Y.

DIRECTORS.—Willard Phillips, Charles P. Curtis, Thomas A. Dexter, M. P. Wilder, Sewell Tappan, Charles Hubbard, W. B. Reynolds, George H. Folger, Francis C. Lowell, Homer Bartlett, James S. Amory.

Documents of an interesting character supplied gratis and forwarded by mail, and full information given, and the principles of life insurance explained, on application to

Parties at a distance may insure from blanks sent free of expense.

JOHN HOPPER,
Agent and Attorney for the Co., at the Branch Office,
Metropolitan Bank Building, 110 Broadway, cor. Pine st., New York City.

TARRANT'S

Effervescent Seltzer Aperient.

This valuable and popular medicine has universally received the most favorable recommendations of the MEDICAL PROFESSION and the PUBLIC as the MOST EFFICIENT AND AGREEABLE

Saline Aperient.

It may be used with the best effect in

BILIOUS AND FEBRILE DISEASES, COSTIVENESS, SICK HEADACHE, NAUSEA, LOSS OF APPETITE, INDIGESTION, ACIDITY OF THE STOMACH, TORPIDITY OF THE LIVER, GOUT, RHEUMATIC AFFECTIONS, GRAVEL, PILES,

AND ALL COMPLAINTS WHERE

A Gentle and Cooling Aperient or Purgative is required.

It is particularly adapted to the wants of Travellers by Sea and Land, Residents in Hot Climates, Persons of Sedentary Habits, Invalids and Convalescents. Captains of Vessels, and Planters, will find it a valuable addition to their Medicine Chests.

It is in the form of a Powder, carefully put up in bottles, to keep in any climate, and merely requires water poured upon it to produce a delightful effervescent beverage.

Numerous testimonials from professional and other gentlemen of the highest standing throughout the country, and its steadily increasing popularity for a series of years, strongly guarantee its efficacy and valuable character, and commend it to the favorable notice of an intelligent public.

TARRANT'S

Cordial Elixir of Turkey Rhubarb.

This beautiful preparation, from the

TRUE TURKEY RHUBARB,

has the approval and sanction of our BEST PHYSICIANS, as a valuable and favorite Family Medicine,

And preferable to any other form in which Rhubarb is administered, either for ADULTS OR CHILDREN, it being combined in a manner to make it at once PALATABLE TO THE TASTE AND EFFICIENT IN ITS OPERATION.

TARRANT'S

Compound Extract of Cubebs and Copaiba.

This preparation is particularly recommended to the Medical Profession and the Public, as combining in the most convenient and efficacious form the well established virtues and properties of Cubebs and Copaiba. In its preparation as an extract, the usual nauseous taste is avoided, and it is consequently never found to disagree with the digestion, while, from its greater concentration, the dose is much reduced. It may be relied on as the best mode for the administration of these remedies in the large class of diseases of both sexes to which they are applicable.

MANUFACTURED ONLY BY

TARRANT & CO.,
No. 278 Greenwich Street corner of Warren,
NEW YORK.

Sent Free by Mail on Receipt of Price.

Clinical Essays, by B. W. Richardson,

M.D. 8vo. London, 1862. $2.00.

BAILLIERE BROTHERS, 440 Broadway, N. Y.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.

Session 1860-61.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Lecture IX.—Part II.

Of the cutaneous affections mentioned, *erythema* is a very common occurrence. It consists of a superficial hyperæmia of the cutis, sometimes complicated with a small amount of exudation. According to the amount of serum transuding through the blood-vessels, more or less desquamation, in very small scales, will take place, but it forms no necessary part of the affection; at all events no formation of vesicles is observed. One of the characteristics is found in the gradual transition of the healthy into the erythematous surface. The etiology of erythema is simple enough; in a large number of cases the causes are: high temperature, and chemical, physical, and mechanical irritation. Different names have been invented to suit the different forms and causes of the affection. They have called it *intertrigo*, when the case was one of erythema, produced by friction of two adjacent surfaces, near the folds of the femora, or neck, behind the ears, or near the mammæ of fat women. *Decubitus* is called the erythematous discoloration of the skin depending on long continued pressure over the sacrum, trochanter, etc., in protracted diseases. *E. læve* it has been named when the consequence of considerable expansion of the skin in dropsy, or the result of local injuries. And a very common form is that depending on the irritation kept up on several places by discharges from the neighboring organs, thus from the nose on the upper lip and cheeks, from the bladder on penis, prepuce, scrotum, and femur.

Besides, erythema is regarded as having been observed epidemically, and with cyclical course. Whether this is founded on truth, or whether or not mild cases of scarlatina or measles were mistaken for a typical erythema, is an undecided question. At all events the differential diagnosis between the several forms is sometimes a difficult one, and especially while both of the mentioned forms of epidemic diseases are frequently observed.

This uncertainty of a distinct diagnosis is not an uncommon thing. It proves that the same anatomical alteration in the skin takes place under different epidemic influences, usually modified by the nature of the latter. Thus, for instance, there is a difference of opinion, up to this day, on the occurrence of epidemic *roseola* or *rubeola*. While some positively deny its existence, taking it as a modified form of scarlatina, or measles, or erythema; others assume its occurrence as an independent disease taking its own course like other epidemic affections, and not at all identical with measles or scarlatina. It is said to consist of isolated, irregular spots, usually with no vascular reaction, but sometimes attended with erethic, and even inflammatory fever; to be uncomplicated in the majority of cases, sometimes, however, to be attended with a tracheal cough, and thus mistaken for measles; sometimes with angina, and mistaken for scarlatina. Neither measles nor scarlatina are said to procure an immunity from rubeola or *vice versa*, while its causes, regular or irregular migration, propagation, contagiousness or non-contagiousness, etc., remain open questions. Now these differences of opinion prove nothing else but the anatomical similarity between the large number of hyperæmic and inflammatory diseases of the skin, and the correctness of Dr. Simon's classification, and its foundation on anatomical principles.

Strophulus (*lichen* in adults) is generally laid down as the most common cutaneous affection during dentition. The exudation does not take place superficially, but into the cutis, sometimes with tumefaction of its tissue. Therefore no vesicles, but little nods, are formed. Its causes are frequently unknown. Whatever is apt to produce a single superficial erythema, may just as well give rise to an affection of the cutis itself in consequence of protracted or more intense injury; therefore coarse linen or flannel, dirt, animal parasites, and high temperature, are best known among its prominent causes. Some forms of "prickly heat" are simply strophulus. It is found either in groups, or isolated, or diffuse, of red, or normal, of extremely pale color, the latter depending on compression of neighboring blood-vessels. Simple strophulus takes a week or two to run its complete course with desquamation and full recovery, chronic cases being rare exceptions. A single form only, lichen *agrius*, which is not at all common in young children, is observed to be attended with severe itching, hyperæmia, and fever, and to be transformed in many cases into a severe form of eczema, with repeated attacks, and thickened and rigid condition of the skin. Simple strophulus requires no treatment, lichen agrius only the local application of cold and the administration of purgatives, baths, salves of tar and potassa, and the internal use of arsenic. I will add the single remark, that this latter remedy ought nowhere to be used except where the cutaneous affection goes along with a great deal of infiltration and induration; in these latter cases it is invaluable.

Caillault, one of the latest authors on cutaneous diseases, comprehends under the head of strophulus, all the erythematous, papular, vesicular, and pustular forms of cutaneous affections occurring during the period of dentition, which disappear in a short time, prove very itching during their course, are observed on any part of the surface, and frequently complicated with intestinal affections. Its eruption is said to be often complicated with fever, which, if true, is easily explained by either the complication or the local irritation and itching. He is not at all particular concerning the memory of his unfortunate readers; the papular strophulus alone being subdivided by him into the forms of strophulus *intertinctus*, and *albidus*, and *candidus*, and *volaticus*, and *confertus*. These subdivisions may be justified as proofs of philological learning, other authors having availed themselves of the same, or similar names, before his time, but there is one fact on which not enough stress can be laid, viz. the occurrence of this form of cutaneous hyperæmia and exudation, not only during the period of dentition, but also before and afterwards. You will find a great many cases in even newborn children, whose skin is particularly irritable.

As to *herpes*, which is an acute and typical disease, when observed in children, the assumption of its being a symptom of dentition is not sustained by anything. It is observed in a large number of feverish diseases, especially in intestinal affections, pneumonia, and intermittent fever; the vesicles raised are very small, superficial, surrounded by a red areola, and always found in groups.

Urticaria (hives) consists of flat and large elevations, mostly of the color of the skin. It depends on serous infiltration of the papillary layer of the cutis, and is mostly an acute affection. Its causes are in no direct connexion with dentition, adults suffering from the same affection when laboring under gastric disorders; and females, when affected with irritation of the uterus, during pregnancy, menstruation, and uterine diseases, or even during the presence of a pessary in the vagina. Other causes are: local irritation by scratching, nettles, rhus toxicodendron and other euphorbiaceæ, some caterpillars and mollusca, fleas, mosquitoes, etc., the eating of strawberries, mushrooms, etc., in some persons, the use of copaiva; the presence of acute gastric catarrh from whatever cause, this latter giving the impression of a severe disease. But not the protrusion of

a tooth. Nor does it appear, that between urticaria as found in children, and again in adults, there is any remarkable difference, either in its external form and symptoms, or in its etiology.

It is true, as a general rule, that there are peculiarities in the diseases of the infantile skin, just as well as of other organs, and that the difference of ages even during infancy and childhood gives rise to a number of modifications in the form, color, etc., of cutaneous affections. But the pathological process itself is the very same, with the exception of the larger number of cutaneous affections in those ages, and of individual differences depending on either more or less irritability and impressibility of both system and skin. By this fact we are prevented from favoring the old assumption, lately again advocated by Caillault, of "diathesis" being the cause of the differences as to the forms and natures of cutaneous affections. At the same time we are enabled to answer the questions laid before you in the course of this lecture, in the following manner—that there is, between the protrusion of a tooth, and the appearance of the larger number of cutaneous diseases, no direct relation of causality; that they do not show themselves with the swelling of the gums; that they do not disappear with or after the final protrusion of a tooth or a group of teeth, and that they do not return with the renewed attempts of another tooth, or group of teeth, to break through the gums. Only those forms of cutaneous diseases scarcely deserving of the name, which depend on an occasional hyperæmia of the surface brought on by general feverish irritation, or the physiological injection of the blood-vessels of the head about this time, are observed during the periods of dentition. They, and the absence of correct diagnoses generally, and the frequency of skin affections in this early period of life, are the reasons of the long continuance of the old assumption of a connexion between external diseases and dentition.

To what extent this is true, I shall finally show by some more extensive remarks on two cutaneous affections very common in infantile age, viz. eczema and impetigo. They are deserving of our particular attention, for their frequent occurrence, the difficulty in removing them, their frequent returns when cured, and their real or assumed connexion with the physiological and pathological condition of the teeth, brain, and system.

Original Communications.

SULPHURIC ETHER AS AN ANÆSTHETIC IN MILITARY SURGERY.

By FREDERIC D. LENTE, M.D.,
OF COLD SPRING.

I send the following notes of the effects of sulphuric ether in military surgery as an appendix to the account of the Mill Creek Hospital, published in a previous number. The cases were not *selected*, but are such as we happened occasionally to have time and opportunity of noting accurately by the watch. In some of the cases, also, the ether was administered by those who had not previously had much experience in its use. Its effect was so prompt and unexpected to many that I was asked, on more than one occasion, if chloroform had not been mixed with the ether. It was, however, used in all cases just as it was furnished by the hospital steward from Squibb's package. At first, it was a question among the surgeons as to what anæsthetic should be selected; but, after ether had been tried a few times, no better anæsthetic was desired, and no other was used except on one occasion, through a mistake of the steward, on which occasion the patient was with some difficulty resuscitated, chloroform having been given with the usual freedom of sulphuric ether.

Trephining, time two and a half minutes, quantity an ounce and a half. Amputation of thigh, time five minutes, two ounces. Extraction of ball from head of tibia, two minutes, seven drachms. Amputation of thigh, two and a half minutes, ten drachms. Large incision of knee-joint, searching for ball, four minutes, twelve drachms. Amputation at knee-joint, three minutes, two ounces. Incision of infiltrated scrotum, half a minute, six drachms. Exsection of shoulder-joint, one minute ten seconds, ten drachms. Exsection of humerus, one minute two seconds, six drachms. Amputation of thigh, three minutes, twelve drachms. Amputation of thigh, four minutes, twelve drachms. Counter-opening in knee-joint, extraction of ball, three minutes, twelve drachms. Searching for ball in the thigh, large incision, three minutes, two ounces.

The above operations were witnessed by many well known surgeons of the State of New York. The time was noted in the first cases by Dr. Thomas C. Brinsmade of Troy, in the others by Dr. Wolcott of Utica, and by myself, occasionally by another surgeon. The ether was generally either administered by Dr. McLean of the 2d N.Y.V., who had always previously used chloroform, but who quickly perceived the advantage of ether, when properly administered; or by myself. Dr. Brinsmade administered it occasionally; Dr. Kissam, of Brooklyn, also.

It is evident, from the effect of the ether in the above cases, and in others where the time was not accurately noted, and is therefore not given, that it is even more efficient as an anæsthetic in military than in civil surgery; the very rapid absorption being probably due to the depressed and feeble condition of the patients. The last case noted, however, is not of this kind. The officer had been wounded at Bull Run, and is now in full health; the ether was administered to him a few days ago at West Point. In all the cases, the inhaler made use of, and which I find more efficient than even the large cupped sponge, was formed by two coarse, stiff towels, folded lengthwise, laid together, and then rolled into a cone, with a handkerchief thrust into the bottom, to render it more shallow and increase the surface for the ether. This fits the face accurately, and effectually excludes all unnecessary air.

COLD SPRING, June 18, 1862.

IS IRIDECTOMY A NEW OR OLD OPERATION?

By JOHN O'REILLY, M.D., F.R.C.S.I.
OF NEW YORK.

What is Iridectomy?—By this term, in former times, was understood an operation instituted for the formation of an artificial pupil.

Who was the first to perform and recommend this Operation?—Cheselden performed and advised section of the iris for the formation of artificial pupil, in the year 1728.

Is Iridectomy performed at the present day, with the same idea as in the times of Cheselden?—No; De Graaffe performs the operation of Iridectomy when he considers vision is impaired or destroyed, as a consequence of inflammation of the choroid membrane accompanied by glaucoma, or a disorganized state of the vitreous humor, with increased secretion of the aqueous humor, thus causing convexity of the cornea, together with almost complete closure of the pupil, thus precluding the entrance of the rays of light into the orbit, and consequently preventing the formation of the pictures of external objects on the retina, thus, in truth, rendering the individual blind.

Is the operation of Iridectomy performed, therefore, simply for the purpose of removing the over distended condition of the eyeballs, as stated by the German surgeons?—I believe the German authorities attribute the efficacy of the operation to the quantity of blood that is lost during the operation, as well as to the escape of the aqueous humor.

Is there any objection to this explanation?—Yes, if the operation were intended to accomplish the objects, solely, just specified, the relief could be at most only temporary, inasmuch as the wound in the iris would soon unite, and there would be nothing to prevent the membrane of the

aqueous humor resuming its functions, and consequently secreting the aqueous humor *de novo* in excess as it had done previous to the operation.

What then is the true explanation of the good effects resulting from the operation as performed by De Graaffe?—The operation is followed by an enlarged condition of the pupil, and consequently is better adapted for the proper admission of the rays of light to act on the retina.

Is De Graaffe the first person who performed Iridectomy for closed pupils consequent on inflammation of the choroid membrane accompanied by glaucoma or a disorganized state of the vitreous humor?—No; In a case of ophthalmitis, where all the coats of the eye are implicated, there must be most assuredly choroiditis as well as inflammation of the hyaloid membrane; it therefore follows in a case of closure of the pupil consequent on inflammation of the eyeball, that the operation of iridectomy accomplished the same object, and is performed under similar circumstances to those under which De Graaffe performs the operation of iridectomy. In the 2d Volume of the *Dublin Hospital Reports*, "Observations on the Operation for Artificial Pupil, by E. Ryan, M.D., senior Surgeon to the Kilkenny County Hospital, Ireland," the following remarks occur in reference to the case of Mary Bryan, aged 30, on whom he operated on the 15th July, 1813; whose sight had been impaired by a violent attack of ophthalmia, eleven years before, and who, for the last seven, had been deprived of the sight of both eyes, and could not distinguish the brightest daylight from night. The pupil of each eye was nearly obliterated, scareely larger than a pin-head and motionless, its border was puckered, three-fourths of the iris *dove* or *fawn* color. Mr. Ryan remarks, in reference to this case: "This case has been selected as the most unfavorable that could present itself for the performance of the Cheselden operation, and yet none could prove more successful: the eyes were much sunk in the sockets; the vitreous humor was disorganized; the iris, from its full orange color, afforded ample evidence of previous high inflammation; the anterior chamber of the eye was much narrowed by the convexity of the iris and its near approach to the corneæ; yet, with all these discouraging appearances, did the operation succeed perfectly, although the lens and capsule were designedly allowed to remain in the posterior chamber of the eye; the iris was divided almost completely across its diameters close to the *ciliary* ligament, a practice which I have *always followed* in such cases." Mr. Ryan remarks at the conclusion of the article, which was written five years after the operation, in 1818, that the case went on well.

It is evident there is a very strong analogy between the operation of Iridectomy as performed by the late Dr. Ryan, nearly fifty years ago, and that now so frequently performed by De Graaffe and the *German surgeons*. In cases of myosis or in such cases where the pupil is contracted to the smallest possible point by continually looking at the smallest possible objects, it is rational to suppose that such cases should derive benefit from the operation of Iridectomy; the section of the iris would allow the rays of light to enter the orbit, precisely in the same manner as in the cases operated on by Mr. Ryan. There can be no doubt that a patient, such as a watch-maker, whose sight has become so impaired as to be unable to see any object; whose pupils are closed to the smallest possible diameter; who is suffering from myosis in its worst form; would be a better subject for performing the operation of Iridectomy on, than the case of Mary Bryan, operated on by Mr. Ryan, when there was palpable evidence that the whole eyeball had suffered from inflammation at a former period. De Graaffe has the credit of performing Iridectomy or section of the iris, in cases which were deemed incurable, and has revived an operation or rather confirmed the propriety of the operation of Mr. Ryan, under the most discouraging circumstances. Mr. Ryan's contemplated the admission of the rays of light into the orbit; De Graaffe's operation is followed by a similar result; therefore the principle of the operation as performed by Ryan and De Graaffe *is the same*.

With respect to the convexity of the cornea and distended state of the eyeball in the cases operated on by De Graaffe, it is to be remarked that where a person is continually looking at very small objects, the cornea is rendered convex by the action of the *recti muscles* as well as that the anterior part of the eyeball is rendered *full* and *prominent* by the action of the same muscles; the Iris is also spasmodically contracted by being kept *continually* contracted, in truth being irritated or held in a *strained* position for too great a length of time, precisely as the *sterno-cleido-mastoid* muscle becomes contracted in cases of wry neck or the *rectus* muscle in cases of strabismus all become spasmodically contracted. Section of the muscles is had recourse to, in this case, on the same *principle* as De Graaffe's operation of Iridectomy, namely, for *relaxation* of the muscular fibres. As it may be said there is no analogy between a spasmodically contracted Iris, a spasmodically contracted *sterno-cleido-mastoid* muscle, and a spasmodically contracted *rectus* muscle, the question arises: Is there a circular muscle in any other place which becomes spasmodically contracted by irritation and continues so? Yes; the circular fibres of the intestinal tube become spasmodically contracted in the case of *intussusceptio* or invagination of the intestine; and an operation similar to Irideetomy, if practieable, would be the best expedient that could be adopted to obtain the necessary relief for the relaxation and dilatation of the contracted intestinal tube.

As it may be objected, as well as asserted that, as the cases operated on by De Graaffe were characterized by glaucoma, and further as, according to Beer, glaucoma does not exist in cases of contracted pupil, the result of overexercise or straining—my observations are not applicable, or made under a delusion; but as Beer says: "It is impossible to produce dilatation of the pupils by medicinal agents, and that consequently the disease must be set down as an incurable complaint."

Therefore I think Beer's observations show the necessity for the operation of Iridectomy, inasmuch as dilatation of pupils cannot be produced without it. With respect to the glaucoma, it is caused by a breaking up of the *areolæ* of the hyaloid membrane in which the vitreous humor is located. It can readily be conceived that the same cause which renders the cornea convex, the ball of the eye prominent, would break up the delicate structure of the *areolæ formed* by the hyaloid membrane; namely, the pressure caused by the action of the *recti* muscles or the exterior of the globe of the eye; the force exercised must act on the interior of the balls as well as anteriorly where the least resistance is opposed, namely, towards the cornea. In confirmation of this view of the matter, it is an anatomical fact that the vitreous humor is *firmer* anteriorly, where it is exposed to the influence of pressure in the manner specified. Again it is to be remarked, that undue pressure would cause the absorption of the *pigmentum nigrum* as well as prevent its secretion by the *membrana Ruyschiana*. With respect to the varicose state of the veins of the choroid in glaucoma, as remarked by *Mr. Guthrie*, it is quite possible the venous blood may be retarded by the action of the *recti muscles*, which at their origin *surround* the optic nerve; their continued action must impede the return of the venous blood; the anatomical relations of the muscles in question, the optic nerve and veins explain the difficulty. In conclusion, I must observe that I have thrown out these hints with a view to bring the subject under the discussion of persons more competent to do it justice than I am.

230 Washington Square South, New York, 10th June, 1862.

M. Van Kampen relates by letter to the French Academy experiments performed by him on the nervous centres with chloroform. A few drops of this liquid brought into contact with the cerebrum or cerebellum of animals produce only anæsthesia; but when poured upon the medulla oblongata produce death; thus confirming the researches of M. Flourens.—*Brit. Med. Jour.*

Reports of Societies.

SURGICAL SECTION.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, April 25, 1862.

DR. JAMES R. WOOD, CHAIRMAN.

DISCUSSION ON TRACHEOTOMY IN CROUP.

Dr. Krackowizer said:—I propose, Mr. Chairman, to confine my remarks this evening exclusively to the technicism of the operation of tracheotomy in croup, and to the after treatment. There are many other points of interest and importance dwelt upon by the gentleman who has opened the discussion, which will bring to light the views and experience of the many members of this Section who have performed this operation. Indeed, there is no city in the world, with the exception of Paris, which could gather in one evening so large a number of surgeons familiar with the subject before us. Tracheotomy in croup has been performed in the two sister cities of New York and Brooklyn, to my knowledge, certainly two hundred and fifty times—oftener than in Great Britain and Ireland, oftener than in Germany. Our late fellow, Dr. W. von Roth, having made the operation forty-eight times, is outranked only by three or four Parisian surgeons in the number of tracheotomies performed. I, myself, have performed tracheotomy in croup thirty-one times; besides that, I have assisted in ten operations. Among such a number I could not but meet with nearly all the varieties and difficulties of the operation and after treatment, described by the authors. I have done the operation well, indifferently, and bunglingly. I can speak of my own merits and blunders; therefore, I think I have an experience and an independent opinion, not altogether worthless to communicate to others.

When physicians in a case of croup have made up their minds that the indication for tracheotomy exists, they ought to be very careful to state to the parents or relatives what the operation can do and what it cannot do. This is so much a matter of common sense that it is generally easy to make oneself understood. Yet, there is one point which I would caution younger practitioners; not to be too decided in what they promise. I have heard many physicians when arguing with the parents the necessity of the operation, tell them, that even if the child could not be saved, yet they would be spared the horrid sight to see it strangle, and that the child "would die easy." So I stated myself when my experience was limited, with a perfectly honest conviction. Yet, since I have been disappointed and heard the regrets of intelligent parents who have consented under a plea which was not verified, I have cast aside this fallacious argument. Most children operated upon, when not saved, after breathing easy for a longer or shorter time, have to enter again a stage of dyspnœa and asphyxia before agony sets in, far more distressing, and impressing itself far more painfully on the memory of those around them, than that which existed before the operation. The sawing sound of croupy respiration in its third and fourth stage, is nothing compared with the hissing of the air through the canula, when the smaller ramifications of the bronchial tubes are blocked up, and with the rattle in the canula and trachea if an operation is unsuccessful. Nothing more ought to be promised than that the access of air through the larynx being impeded, the operation can establish an artificial way for the entrance of air.

I will not waste the time of the Section by going into the details of the operation. I shall dwell mainly on points, the importance of which has been impressed upon me by actual observation and experience.

I coincide with Dr. Voss that the use of anæsthetics is of great help in the operation, and not more dangerous than in other surgical operations. Dr. W. von Roth used chloroform for the first time in this city, June 14, 1854. But I believe that Snow, of London, preceded him. I have used it now eight times, and have seen it used four or five times, and never have I noticed any bad effect during the anæsthetic condition of the patient, nor was the result any other one than would legitimately belong to the case. In one instance, I desisted from continuing the inhalation, because the very refractory child struggled so hard against it, that the dyspnœa threatened to assume a dangerous degree. Where children are operated upon in the anæsthetic stage, being the result of accumulation of carbonic acid in the blood, there is no necessity of artificial anæsthesia. When a sufficient number of professional assistants is at hand, it may be indifferent whether you give chloroform or not. But when there are not enough or wanting, its use will certainly facilitate the operation to an immense degree. I may state here, in passing, that the use of chloroform, as preparatory to the operation of tracheotomy, dispels at once the erroneous theory upheld by the most recent authors, and refuted first by J. Niemeyer, that spasm of the vocal cords is a largely entering element in producing laryngo-stenosis besides the swelling of the mucous lining and the false membrane. If such were the case, during the artificial sleep the dyspnœa ought to diminish, which it does not perceptibly. In short, the question of using anæsthetics in this operation ought to be looked upon in this light, I believe: The attempt to administer them in a child with croup, of course, is resisted, and the dyspnœa is transiently increased, a thing not to be done without great counter-balancing benefit. This benefit, then, is the quietness of the patient during the operation.

In a child *not* under the influence of anæsthetics, the pain from the operation causes struggling, and thereby increase of dyspnœa. So, increase of dyspnœa will be met with, only in the second case probably during a longer period, and besides the shrugging of the shoulders, by the attempts to extricate itself by the increased fulness of the veins from crying, the operation is made more difficult and dangerous.

Although Guérsant for himself may truly say, that for him tracheotomy in croup is not more than a phlebotomy, yet I find that it is but seldom an easy, and very often quite a difficult operation. Not only the restlessness of the patient, the rapid motions up and down of the larynx and trachea, the great distension of the veins make it so, the common symptoms too when we have to operate for laryngo-stenosis in adults, but to an equal degree, *the disproportion between the size of the surgeon's hands, and the child's neck.* I have, therefore, very early attempted to correct this, by making the instruments in size corresponding to the child's frame.

(To be Continued.)

American Medical Times.

SATURDAY, JUNE 28, 1862.

MEDICAL AND SURGICAL HISTORY OF THE REBELLION.

Surgeon General's Office, Washington, June 9, 1862.

"It is intended to prepare for publication the Medical and Surgical History of the Rebellion.

"The Medical portion of this work has been committed to Assistant-Surgeon J. J. Woodward, United States Army, and the Surgical part to Brigade-Surgeon John H. Brinton, United States Volunteers.

"All medical officers are therefore requested to cooperate in this undertaking by forwarding to this office such sanitary, topographical, medical and surgical reports, details of cases, essays, and results of investigations and inquiries, as may be of value

for this work, for which full credit will be given in the forthcoming volumes.

"Authority has been given to both the above-named gentlemen to issue, from time to time, such circulars as may be necessary to elicit the desired facts, and the medical officers are desired to comply with the requests which may thus be made of them.

"It is scarcely necessary to remind the medical officers of the regular and volunteer services that, through the means in question, much may be done to advance the science which we all have so much at heart, and to establish land-marks which will serve to guide us in future.

"It is, therefore, confidently expected that no one will neglect the opportunity of advancing the honor of the service, the cause of humanity, and his own reputation.

"WILLIAM A. HAMMOND, *Surgeon-General, U.S.A.*"

The Director-General of the British Army states that when he was ordered to provide an adequate Medical Staff and the amount of stores likely to be wanted for hospital purposes by the Army, during the Crimean War, he was perplexed to know what would be required, and endeavored to determine by searching the records of the Department, and learning what were the wants of the Army during the Campaigns of Spain and Portugal. The search proved unproductive, as only two or three valueless documents were found, and he was finally obliged to rely upon his own unaided judgment. He came to the following very sensible conclusion:—"The doubts and indescribable anxieties which resulted from the absence of all details calculated to instruct, under the existing circumstances, led me early to determine that my successor should, provided I continued in office till the termination of the war, never have to encounter the many difficulties and perplexities which had fallen to my share." Such was the origin of the Medical and Surgical History of the British Army during the Crimean War, which will long remain one of the most valuable works on Military Surgery in the English language. Its topographical sketches, with maps, its minute records of the physical state and surrounding conditions of each regiment preceding and during the war, its detailed descriptions of the diseases which prevailed, and, finally, its records of the gunshot wounds, operations, etc., etc., render these volumes an inexhaustible storehouse of information for the student of Military Surgery.

Since our national independence we have passed through two wars, both of which furnished valuable experiences in Military Medicine and Surgery; but only the most meagre and unofficial records now remain. MANN's sketches give us some interesting particulars of the war of 1812, but only to make us feel keenly the loss the profession has sustained by the neglect of the Medical Bureau to collect and preserve the records of that war. The Mexican war was also suffered to pass without any attempt at an official history of its medical affairs. We have some aggregates of the sick and wounded; but no records which will enlighten the future medical historian. The experiences of our wars have as yet thrown no light upon Military Surgery. We are now in the midst of a war which has already revolutionized military science. Its influence on the Science of Military Surgery cannot even be surmised. How careful should we be to gather and preserve the fruits of this experience, so ample and so ripe, and transmit them to the future students of Military Surgery, and add them to the medical literature of the United States.

While we are not unmindful of the valuable Reports on the *Medical Statistics* of the Army which have been issued from this Bureau, we must regard this comprehensive plan of SURGEON-GENERAL HAMMOND of collecting the materials for a Medical and Surgical History of the Rebellion, reducing them to form, and issuing them in separate volumes, as inaugurating a new era in the Medical Department. The profession will look on the undertaking with great favor, and we hail it as the first fruits of that reform which has placed at the head of the staff a thoroughly scientific and accomplished medical officer. If the country should reap no other additional advantage from the reorganization of the Medical Department, than this historical record, it will compensate for all the effort required to effect the change. The preparation of the history has been intrusted to very able hands. ASSISTANT-SURGEON WOODWARD, to whom is assigned the Medical portion of the work, is favorably known to the profession by his contributions to periodical literature, and especially by his elaborate and interesting papers on the histology of cancer; BRIGADE-SURGEON BRINTON, who has charge of the Surgical part of the history, brings to his task a mind well trained by previous study and experience for this special labor.

We must remind our readers in the Medical Staff of the Army that the intrinsic value of this projected history rests in a great degree with them; from them all the materials are to be derived, and upon the accuracy and completeness of their individual records will depend the perfection of this great national work. Every surgeon in the service, whether in hospital or the field, should keep full and accurate notes of his experience, and forward them to their proper destination. With those engaged in the field, who often see their patients only during an operation, there is a difficulty about keeping records. The cases operated upon immediately pass from their observation, are transported to hospitals, and subsequently, perhaps, pass through several hospitals. About a year ago we proposed a plan of supplying this defect in the history of cases, which seems to us practical. We repeat it, in the hope that it may suggest a system of note-taking which will make the records of cases accurate and complete.

"It is worthy of consideration, whether a code of signs cannot be adopted, by means of which the surgical history of each case can be written with a pencil of nitrate of silver upon some parts of the cutaneous surface, to be transcribed and rendered by the hospital surgeon who receives it."

THE WEEK.

ASSISTANT-SURGEON JONA. LETTERMAN has been appointed MEDICAL-DIRECTOR of the Army of the Potomac. This is one of the most important positions, just at this time, in the Medical Staff of the Army. The letter of the SURGEON GENERAL (in another column) on making this appointment, gives ample and most gratifying evidence that the present Chief of the MEDICAL BUREAU is fully alive to the responsibilities of the medical service of the Army, and that a strong will and master-hand will hereafter control the duties and destinies of that Department of Government. It will be noticed, that this appointment is made, not on account of seniority, but because the appointee has shown his qualifications for the post by previous important services. This is hereafter to be the guiding principle in the selection of officers for important trusts in the Medical Service of the Army.

THE retirement of DR. TRIPLER from the position of Medi-

cal Director of the Army of the Potomac cannot be passed by without notice. Since the unfortunate battle of Bull Run Dr. Tripler has held this most important and responsible post, and has given to the discharge of its duties the well directed energies of an experienced mind. To arrange and systematize the medical affairs of this large department, both in camp and in field, has required constant and excessive labor amid a thousand annoyances and perplexities. But these difficulties have all been overcome, and to-day the Army of the Potomac has a better medical provision than any army in the world. In retiring from this position, we believe Dr. Tripler will carry with him the warm sympathies and kindest wishes for his future happiness of the Medical Staff of the Army, and of the volunteer surgeons who have served under his orders.

—

During the past week the law against swill-milk dealing in this city was enforced. A large number of milkmen were arrested, all of whom pleaded ignorance of the law, and after being suitably reprimanded were discharged with the promise, if again arrested for the same offence, they would be dealt severely with.

Army Medical Intelligence.

LETTER FROM THE SURGEON-GENERAL TO SURGEON LETTERMAN, MEDICAL DIRECTOR OF THE ARMY OF THE POTOMAC.

Surgeon-General's Office,
Washington City, June 19, 1862.

Sir:—You are detailed for duty with the Army of the Potomac as Medical Director.

In making this assignment, I have been governed by what I conceive to be the best interests of the service. Your energy, determination, and faithful discharge of duty in all the different situations in which you have been placed during your service of thirteen years, determined me to place you in the most arduous, responsible, and trying position you have yet occupied.

On the eve of your departure, I desire to place before you some of the main points which should engage your attention.

You should satisfy yourself that the medical supplies are in proper quantity and of good quality, and that each regiment has its full allowance, and you will hold the senior medical officer to a strict accountability for any deficiency. The time has passed when the excuse of "no supplies" will be accepted.

2. You will lay before the officers of the Quartermaster's Department your necessities in regard to transportation, and communicate freely with the General commanding relative to those things in which he is able to assist you.

3. You will require all medical officers to be attentive and faithful in the discharge of their duties, and you will report instantly to the General commanding and to this office all cases of dereliction.

4. You will, in conjunction with Assistant-Surgeon Dunster, United States Army Medical Director of transportation, arrange for the safe, effectual, comfortable, and speedy transportation of such sick and wounded as in your opinion should be removed from the limits of the army to which you are attached. You will have in mind, however, the provision of General Orders No. 65, relative to the transportation of troops, and you will therefore, as far as possible, provide for these cases at such points in your vicinity as may seem best adapted to the purpose.

5. You will hire such physicians, nurses, etc., as you may require, and as you can obtain on the spot, making known to me immediately your deficiencies in those respects at the earliest possible moment, so that I can supply you.

For the full performance of all these duties, you are authorized to call directly on the Medical Purveyors in Washington, Baltimore, Philadelphia, and New York, who will be directed by letter what you have ordered, and of whom; and you are to furnish you with everything you may ask for, regardless of supply tables or forms. You will only be required to notify me, desired to correspond frequently with me, and to make known such wants as can only be filled by my requisitions on the several Bureaus here, or through the orders of the Secretary of War.

And now, trusting to your possession of those qualities without which I should never have assigned you to this duty, I commit to you the health, the comfort, and the lives of thousands of our fellow-soldiers, who are fighting for the maintenance of their liberties.

I am, Sir, very respectfully, your obed't serv't,
Wm. A. Hammond, Surgeon-Gen., U. S. A.

Ass't-Surgeon Jona. Letterman, Medical Director Army of the Potomac.

Surgeon-General's Office, June 5, 1862.

The Secretary of War having authorized in certain cases the employment of civilians as cooks and nurses for duty in General Hospitals (only), the following rules and instructions are published for the information of all concerned:

REGULATIONS FOR THE HOSPITAL CORPS OF THE UNITED STATES ARMY.

The men of the Hospital Corps will receive each $20.50 per month, besides clothing, rations, and medical attendance.

They will be under military discipline, and subject only to the orders of the Medical authorities, and will wear the undress uniform of a private soldier, with a green half chevron on the left forearm.

Their duties will be either nursing the sick and wounded of the Army in Hospitals, cooking, or any other duties with the sick at the discretion of Medical Officers.

They will be divided into squads of eleven, one of whom will be responsible for the efficiency of the rest. One squad will be allowed to every one hundred patients.

At the usual roll-calls, the chief of the squad will answer for the rest to the Hospital Steward, who will thus learn the number of vacant beds in each ward, and all other particulars concerning the condition and wants of the hospital, which he will report to the Medical "Officer of the Day." The term of the service of the Hospital Corps will be according to the necessities of the service, or during good conduct.

The amount of pay and clothing received by each nurse, with date, will be recorded on their contract, which will be as a Descriptive List to go with the nurse.

The senior Medical Officer in charge will make a monthly pay roll of the Hospital Corps similar to Form 12, Medical Regulations, except the rank and designation, and transmit the same for payment to the nearest Medical Disbursing Officer.

Surgeons in charge of General Hospitals, when so authorized, may make contracts with persons for such service according to the provisions set forth herein.

William A. Hammond, Surgeon-General.

Note.—It is hereby enjoined upon all Medical Officers that they shall not avail themselves of this special authority of the War Department without first receiving permission of the Surgeon-General to do so, on making a full statement of the facts in the case, and clearly setting forth the reasons why the permission should be granted, except in cases of immediate necessity and urgency, and then the Commanding Officer must approve. In such exceptional cases the facts will be promptly reported to the Surgeon-General with the necessary explanations, together with a request that permission be given to continue the employment if the necessity still exists.

The Hygeia Hospital at Fortress Monroe is to be broken up, and the patients transferred to a more healthy and convenient place. An order will also be made to discontinue sending sick and wounded to Yorktown. There are now at that post nearly fifteen hundred, and the accommodations are very inferior and the water unhealthy.

INDEX.

A.

Academy of Medicine, proceedings of, 53, 67, 82, 95, 235.
After-pains, character and treatment of, 47.
Agnew, Dr. D. H., on Baron Larrey, 29.
Ague, brass founder's, 290.
Albuminuria, 201, 215, 241, 275, 314.
Alley, Dr. J. B., death of, 270.
Amaurosis, injury, sub-orbital nerve, 150, 184; with tænia, 228.
American Medical Association, meeting of, 110, 211.
Amputation of lower extremities, 262.
Anæsthetics in midwifery, 40, 53, 67, 82, 95, 158; in military surgery, 356.
Anderson, Dr. A., review of work by, 58, 72.
Aneurism, arch of aorta, 192.
Ankle-joint, compound dislocation of, 53.
Antaphrodisiacs, remarks on, 245.
Army, reorgadization of medical department of, 56; measures of reform in medical department of, 181; intoxicating liquors in, 182; resources of medical department of, 210; passage of medical reform bill, 238; changes in medical bureau of, 251.
Army correspondence, 17, 45, 113, 198, 199, 213, 311.
Arnold, Dr. E., lesion of urethra, 5; letter from, 60.
Arsenious acid in fever, 32; poisoning by, 167.
Artificial limbs, adaptability of, 263.
Arum maculatum, poisoning by, case of, 328.
Autopsy, fees for, 60.

B.

Barker, B. F., Dr, anæsthetics in midwifery, 95; lectures on puerperal diseases, 47, 61, 89, 145, 159, 285.
Bauer, Dr. L., lobulated inflammation of spleen, 109; tubal pregnancy, 109; stricture of œsophagus, 109; endostitis of femur, 109; arsenial gastritis, 167.
Bayonet wound, case of, 273.
Bedford, Dr. G. S., notice of work by, 228.
Bell, Dr. L. F., death of, 116.
Belladonna, poisoning by, 41.
Bellevue hospital reports, 192, 206, 221, 319, 333.
Bennet, Dr. E. P., plugging the vagina, 108; letter from, 353.
Bigham, Dr. John G., death from corrosive sublimate, 347.
Biliary calculus, 108.
Blackman, Dr. Geo. C., letter from, 298.
Bladder, sacculation of, 175; new remedy for irritable, 289.
Bloody fluid in pleuritic cavities, 62.
Bly, Dr. D., amputation of lower extremities, 262.
Bradford, Dr. J. T., exsection of the os calcis and cuboid, 38.
Brain, sensibility of, 204; compression of, 206, 221.
Brandy, test for, 304.
Breasts, inflammation of, 145.
Bretonneau, death of, 186.
Briddon, Dr. C. K., lithotomy in children, 50.
Bright's disease succeeding diabetes, 179; induced by abdominal disease, 248; with erysipelas, 304; general remarks on, 314.
Brooks, Dr D., death of, 74.
Bryan, Dr. J., letter from, 339.
Buck, Dr. G., intus-susception of ileum, 208.
Bulkley, Dr. H. D., ipecac in dysentery, 64; albuminuria, 201, 215.
Bumstead, Dr. F. J., exophthalmos, 164; diplopia, 217.
Burgess, Dr. O. O., letter from, 228.
Byrne, Dr. J., inversion of uterus, 273; notice of work by, 295,

C.

Calculi, urinary, new remedy for, 341.
Campbell, Dr. J. L., ovarian tumor, 305.
Cancerous disease succeeding chronic mammitis, 276.
Castor oil leaves, galactagogue properties of, 23, 218.
Cataract, extraction of, 24; pathology of, 69.
Cerebellum, tumor of, 124.
Cervix uteri, non-shortening of, to end of pregnancy, 342.
Chapin, Dr. J. B., improvement of condition of insane, 189, 219, 315.
Chloroform, new method of administering, 32; in midwifery, 40, 53, 67, 82, 95, 158.
Cholesteatomatous tumor, 305.
Cirrhosis of liver, 136.
Clark, Dr. A., homicidal cut-throat, 48, 62, 76, 91; diabetes and Bright's disease, 179; bronze disease, 180; chronic abdominal disease and Bright's kidney, 248; diphtheritic membrane, 305; remarks on albuminuria, 314.
Colchicina, properties, etc., of, 173, 187.
College Physicians and Surgeons, report from, 81.
Conant, Dr. D. S., mitral disease, 10; tumor of cerebellum, 124.
Concussion of brain, cases of, 123.
Conkling, Dr. J. T., letter from, 143.
Connecticut Medical Society, 338.
Connecticut Riv. Medical Association, meeting of, 325.
Consumption, pulmonary, influence of, in chronic pleurisy, 178.
Cooper, Dr. E. S., fractured skull, 319; removal of cervical tumor, etc., 330; necrosis of tibia, case of, 347.
Corrosive sublimate, 19, 33; death from, case of, 347.
Croup, tracheotomy in, 265, 276, 293, 357.
Cystic hygroma, 26.

D.

Delirium tremens, treatment by iced bath, 143; causes and treatment of, 258.
Dentition and its derangements, lectures on, 271, 299, 313, 355.
Dermatophyte, case of a, 304.
Deslandes, Dr. P. F. C., letter from, 17; progress med. science, 194, 223.
Detmold, Dr. W., anæsthetics in midwifery, 53.
Diabetes succeeding Bright's disease, 179.
Diphtheria, paraplegia following, 86; characters of, 107; casts, expectoration of, 167; in country, 233, 244; general remarks on, 261.
Diplopia, case of, 217.
Dislocation of femur, 233.
Donaghe, Dr. W. R., fractured cervix femoris, 152.
Draper, Dr. W. H., Bright's disease, 304.
Duodenum, ulcer of, 191.
Dysentery, chronic, use of ipecac in, 64.

E.

Echeverria, Dr. M. G., letter from, 185; delirium tremens, 258.
Ecchymosis of tongue, value of in asphyxia, 78.

Eggs, sex of, 312.
Elliot, Dr. G. T., anæsthesia in obstetrics, 54, 67; difficult obstetrical cases, 93; address of, 156.
Entropium, supplementary operation for, 24.
Epididymis, scrofulous disease of, 180.
Epilepsy, trephining in, 31; from fractured skull, 319.
Epistaxis, treatment of, 253.
Ether in military surgery, 356.
Ether Patent, the, 83.
Evil, remedy for an, 335.
Exophthalmos, two cases of, 164.
Exsection, of hip, 29; os calcis, etc., 38, 101, 171; shoulder-joint, 332.
Eye, extirpation of, 250, 275.
Eye, photographs of the, 270.

F.

Face presentations, mechanism and treatment of, 21, 35.
Faculty Medicine, Paris, new appointments, 308.
Femoral artery, ligation of, cases of, 332.
Femur, dislocation of, 233.
Fever, review of work on, 58, 72.
Finnell, Dr. T. C., biliary calculus, 108; triplet placenta, 108; fractured spine, 168; scrofulous disease of epididymis, 180; larynx in scarlet fever, 208; epilepsy from fractured skull, 306.
Flint, Dr. A., chronic pleurisy and phthisis, 178; valvular disease, 179, 193; contracted kidney, 248; hydro-pneumo-thorax, 275; carcinoma of stomach, 320.
Foreign medical notes, 115, 144.
Fort Donelson, wounds at battle of, 217.
Fort Monroe, health of troops at, 18; medical statistics of, 74; hospitals at, 326; report of the Mill Creek Hospital of, 328.
Fractures, compound, treatment of, 11; conservative treatment of, 268, 281, 295; of long bones, new apparatus for, 254; of skull, cases of, 151, 165; of scapula, 39; of spine, 168.

G.

Gardner, Dr. A. K., chloroform in midwifery, 68.
Gastritis from corrosive poison, 167.
Gilfillan, Dr., castor oil leaves, 23, 218.
Gilman, Dr. C. R., chloroform in midwifery, 40.
Glück, Dr. L., conservative treatment of fractures, 268, 281, 295.
Gold, properties of, 75.
Greene, Dr. W. W., sacculation of bladder, 177.
Griscom, cancerous disease of intestines, 320.
Griswold, Dr. S. S., death of, 18.
Gross, notice of work by, 253.
Guild, Dr. J. H., diphtheria in country, 233.
Gunshot wounds, pelvis, thorax, 6; knee, trachea, thigh, 7; carotid artery, 67; head, 137; miscellaneous cases of, 205.
Gypsum bandages, 268, 269.

H.

Hamlin, Dr. A. C., diphtheria, 107.
Head, cases of injuries of, 122, 137, 151.
Health bill, failure of, 250.
Heart, hypertrophy and dilatation of, 4; fatty degeneration of, 193; valvular disease of, 193.
Hemiopia, singular case of, 175.
Henbane, inefficacy of, 298.
Hewitt, Dr. H. S., suspension of, 298, 324.
Hip, amputation at, cases of, 332.
Homœopathy in military hospitals, 42.
Horr, Dr. Asa, kerosolene, 78.
Hospital, Ladies' Military, inauguration of, 267.
Hospital Corps of the United States Army, regulations for, 360.
Household hygiene, 237.
Hunt, Dr. E. M., diphtheria, 244, 261.
Hutchison, Dr. J. C., dislocation of femur, 233.
Hydro-pneumo-thorax, without symptoms, 275.
Hydrocephalus, spurious, cases of, 290.
Hydrophobia in Europe, 102; report of case of, 319.

I.

Ileum, intus-susception of, 208.
Injuries of the head, nature and treatment of, 165.
Insane, improvement of condition of, 189, 219, 315.
Intestine, lardaceous tumor of, 207; intus-susception of, 208; occlusion of, 320; cancerous disease of, 320.
Intra-orbital cyst, case of, 217.
Iodide potassium in meningitis, 333.
Iodine, properties of, 103, 117, 131.
Iridectomy, history of operation of, 358.
Iron, iodide of, properties, etc., of, 1.
Irwin, Dr. B. J. D, bayonet wound, 273.

J.

Jacobi, Dr. A., dentition and its derangements, 271, 299, 313, 355.
Jalapin of commerce, lecture on, 327.
Janes, Dr. E. H., reports on materia medica, 149, 245, 289; progress medical science, 27, 41, 55, 140, 236, 277, 293, 306.

K.

Kerosolene, experiments with, 78.
Kidd, Dr. Chas., letter from, 158.
Kidney, carcinoma of, 124.
Knee-joint, loose cartilages in, 55; exsection of, 110.
Kneeland, Dr. J., ulcer of stomach and duodenum, 191.
Krackowizer, Dr. E., cystic hygroma, 26; osteo-sarcoma, 26; mammary tumors, 222; aneurism, subclavian, 222; double morbus coxarius, 301; occlusion of intestine, 320; fibro-cystic tumor of uterus, 320; tracheotomy in croup, 358.

L.

Larynx, function of, 87.
Lassing, Dr. H., venereal diseases, 348.
Lee, Dr. C. A., hypertrophy of heart, 4; hemiopia, 175; letters from, 339, 353.
Lent, Dr. F. D., report of Mill Creek Hospital, 328; ether in military surgery, 356.
Leon, Dr. A. M., letter from, 171.
Letterman, Jona., letter from the Surgeon-General to, 360.
Lewis, Dr. Geo., climate of Minnesota, 147, 162.
Lithotomy in children, 50.
Lochia, characters of, 48, 61.
Loomis, Dr. A. J., carcinoma of kidney, 124; tumor of intestine, 207.
Lunacy, commission of, 209.
Lyman, Dr. F. R., epidemic puerperal fever, 235.
Lyman, Dr. Henry M., accidents following vaccination, 105, 119, 133.
Lynch, Dr. E., letter from, 199.

M.

Mammary abscess, 145, 159.
Mammary tumors, 222.
Mammitis, symptoms and treatment of, 159.
Mania-a-potu, causes and treatment of, 258.
Marsh, Dr. M. M., cirrhosis, liver, 136.
Martin, Dr. J., face presentations, 21, 35.
Mechanical surgery, claims of, 266.
Medical bureau, changes in, 251.
Medical provision on railroads and steamboats, 56.
Medical reform bill, passage of, 238.
Medical societies, influence of, 195.
Medical Society of the State of New York, regulations of, 46; proceedings of, 86, 87, 96, 101.
Meningitis treated with iodide of potassium, 333.
Menstrual decidua, 41.
Mercury, external use of sol. of persulph. of, 277.
Metropolitan health bill, 128.
Military hospitals, in Cincinnati, 270; proper construction of, 338.
Military surgery, cases in, 6, 205; experience in the practice of, 331; review of works on, 337, 352, 353.
Milk fever, treatment of, 89.
Mill Creek Hospital, report of, 328.
Minnesota, climate of, 147, 162.
Minis, Dr., death of, 186.
Missouri, health of troops in, 129.

Mitchell, Dr. Samuel, letter from, 198.
Morbus coxarius, splint for treatment of, 23; case of double, 30.
Morris, Dr. F. W., letter from, 298.
Murder, case of supposed, 48, 62, 76, 91.
Murray, Dr. Wm., death of, 172.

N.

Naval medical board, 88.
Navy, surgical service of, in times of war, 272, 288, 300.
Nervous system, notice of work on pathology of, 183, 196, 212, 226, 239.
New remedies, lectures on, 1, 19, 33, 75, 103, 117, 131, 173, 187, 229, 243, 257, 327, 341.
N. E. Dispensary, organization of, 312.
N. J. State Medical Society, meetiug of, 100.
N. Y., its sanitary relations to the State, 98.
N. Y. Academy of Medicine, proceedings of, 40.
N. Y. Eye Infirmary, reports from the, 264, 274.
N. Y. health bills, 70.
N. Y. Hospital, reports from the, 8, 39, 122, 137, 151, 165.
N. Y. State Volunteer Hospital, report of, 303.
N. Y. Pathological Society, proceedings of, 10, 26, 40, 108, 124, 167, 178, 193, 207, 222, 248, 275, 292, 304, 320, 334.
Noeggerath, Dr. E., inversion of uterus, 230.
Noyes, Dr. H. D., reports of, 24, 69; amaurosis, 150; staphyloma corneæ, 264, 274; extirpation of eye, 275, 250; photographs of the internal eye, 270.
Nursery and Child's Hospital, reports from, 94, 290.

O.

Œsophagus, case of stricture of, 109; ulceration of, 167.
O'Meagher, Dr. Wm., cases in military surgery, 7, 205; letter from, 114.
O'Reilly, Dr. J., iridectomy, 356.
Ophthalmology, report on, 69.
Ovarian cysts, removal of, 292, 334, 335.

P.

Paraplegia, case of, 168.
Parker, Dr. W., ovarian tumor, removal of, 334; vaginismus, 349.
Parigot, Dr. I., psychological medicine, 37, 65, 246.
Peaslee, Dr. E. R., anæsthesia in midwifery, 40, 82; ovarian cyst, 292; vaginismus, 349.
Percy, Dr. S. R., iodide iron, 1; corrosive sublimate, 19, 33; gold, 75; iodine, 103, 117, 131; colchicina, 173, 187; podophyllin, 229, 243, 257; jalapin, 327; solvents, 341.
Perineal section, 8, 9.
Perineum, laceration of, 285.
Philadelphia College of Physicians, new building for, 337.
Phthisis influenced by chronic pleurisy, 178.
Physicians, public services of, 169.
Pierce, Dr. J. D., obituary of, 240.
Placenta prævia, management of, 27.
Pneumo-hydro-thorax without symptoms, 275.
Podophyllin, characters and properties of, 229, 243, 257.
Pooley, Dr. J. H., letter from, 58.
Post, Dr. A. C., fracture of cervix femoris, 54, 168; melanosis neuromæ, 276.
Pott's disease, spine, mechanical treatment for, 79, 121, 192.
Professional ignorance, a cause of, 141.
Public services of physicians, 169.
Puerperal diseases, lecture on, 47, 61, 89, 145, 159, 285.
Puerperal fever in Bellevue Hospital, 235.
Pulmonary apoplexy, 64.
Psychological medicine, status of, 37, 65.
Psychology, social, 246.

R.

Railroad provision for wounded, 111.
Rawson, Dr. C. H., letter from, 130, 199, 312.
Read, Dr. J. T., letter from, 31.
Red tape, influence of, 322; loop of, severed, 336.
Remedy, a, for an evil, 335.
Ricinus communis, properties of leaves of, 23, 218.
Rochard, Dr. Jules, surgical service of Navy, 272, 288, 300.

S.

Sanitary condition of N. Y., 98.
Sanitary commission, claims of, 308; review of report of, 14.
Sanitary legislation, 28; regulations, 241.
Sarracenia purpurea in small-pox, 297.
Sayre, Dr. L. A., letter from, 143.
Scalp wounds, treatment of, 123.
Scapula, fracture of, 39.
Scarlatina, trachea, larynx in, 208.
Scrive, M., obsequies of, 16.
Sea-sickness, remedies for, 339.
Selection vs. Succession, 126.
Senate-chamber, ventilation of, 350.
Séquard, Dr. E. B., notice of work by, 183, 196, 212, 226, 239.
Ships, importance of ventilation in, 340.
Shoulder-joint, exsection of, 332.
Sick soldiers, accommodations for, 337, 338.
Sims, J. M., vaginismus, 310, 317; removal of ovarian tumors, 335.
Skull, fractured, base of, case of, 137.
Small-pox, pitting in, 27; in N. Y., 44, 98; case of, 122; control of, 225; a new remedy for, 297.
Smith, Dr. David P., experiences in the practice of military surgery, 331.
Smith, Dr. G. K., fractured cervix femoris, 125, 138.
Smith, Dr. J. Lewis, diphtheria, 94; ulceration œsophagus, 167; secondary arachnitis, 193; spurious hydrocephalus, 290; dermatophyte, 304; cholesteatomatous tumor, 305.
Smith, Dr. O., letter from, 144.
Smith, Dr. Stephen, notice of work by, 352.
Solvents, lecture on, 341.
Spine, case of fracture of, 168.
Spleen, lobulated inflammation of, 109.
Sprinkling of blood, value of in suicide, 77.
Staphyloma corneæ, cases of, 264, 274.
Stillé, Dr. A., review of work by, 85.
Stomach, ulceration of, 191; carcinoma of, 320.
Stricture of urethra, treatment of, 140.
Suckley, Dr. G. S., letter from, 129.
Suffocation and hæmorrhage, concurring, 77.
Suicide, medical jurisprudence of, 48, 50, 62, 76, 91.
Supra-renal capsule, disease of, 180.
Surgical ingenuity, 293.
Surgical Section, proceedings of, 54, 125, 138, 152, 168, 265, 276, 258.
Swan, Dr. C. Y., letter from, 72, 153.
Swill milk, finale of, 278.
Syphilis, prevention of, 348.

T.

Taylor, Dr. I. E., anæsthetics in midwifery, 82; non shortening of cervix uteri to end of pregnancy, 342.
Teeth, syphilitic malformation of, 236.
Tempero-maxillary articulation, destruction and reproduction of, 330.
Thompson, Dr. J. H., letter from, 200.
Thyroid gland, removal of, 10.
Tibia, necrosis of, case of, remarkable cure of, 347.
Tongue, bloodless removal of, 306.
Tourniquet, description of a new, 280.
Trachea, foreign bodies in, 306.
Tracheotomy in croup, 265, 276, 293, 357.
Triticum repens, properties of, 289.
Tumor, involving parotid and submaxillary glands, successful removal of, 330.
Typhoid fever, English views of, 112.

U.

U. S. General Hospital, reports from, 67.
Urethra, lesion of, 5, 8, 9; stricture of, 236.
Urinals, public, necessity for, 267.

Urine, solvent power of, in vesical calculi, 341.
Uterine inflammation, leeches in, 140; ulcer, causes of failure in treatment of, 307.
Uterus, fibro-cystic tumor of, 320; inversion of, 230, 235, 273; non-shortening of, to end of pregnancy, 342.

V.

Vaccination, accidents of, 105, 119, 133; of infants, 194, 223.
Vaccine virus, influence of concurrent diseases on, 185.
Vagina, new method of plugging the, 108, 143, 198.
Vaginismus, with the method of treatment, 310, 317; discussion on, 349.
Varicose ulcers, new treatment of, 277.
Variola, case of, 122, 225.
Vedder, Dr. J. H., new extension splint, 23; fracture apparatus, 254.
Venereal diseases, prevention of, 348.
Ventilation, remarks on, 350.
Vesico-vaginal fistula, new instrument for, 307.
Volunteer surgeon, compliments to, 312.
Voss, Dr. L., removal of thyroid gland, 10; tracheotomy in croup, 265, 276.

W.

Wallace, Dr. S. C., variola, case of, 122.
Water closets, necessity for public, 267; insanitary influence, of, 280.
Watson, Dr. J., anæsthesia in midwifery, 82.
White, Dr. S. P., vaginismus, case of, 350.
Willard, Dr. S. D., letter from, 46.
Williams, Dr. A. V., death of, 172, 183, 200.
Willson, Dr. G. B., sensibility of brain, 204.
Winter session, close of, 154.
Wiswell, Dr. S. L., compound dislocation of ankle, 53.
Wood, Dr. J. A., Pott's disease of spine, 79, 121, 192.
Wounds of throat, movements after, 76.

DEATHS.

HINMAN.—At his residence in Brooklyn, N. Y., RICHARD H. HINMAN, M.D., Surgeon to the First Regiment Long Island Volunteers, of fever contracted in camp.

METEOROLOGY AND NECROLOGY OF THE WEEK IN THE CITY AND COUNTY OF NEW YORK.

Abstract of the Official Report.

From the 16th day of June to the 23d day of June, 1862.

Deaths.—Men, 85; women, 71; boys, 98; girls, 84—total, 341. Adults, 159; children, 182; males, 186; females, 155; colored, 4. Infants under two years of age, 133. Children reported of native parents, 19; foreign, 135.

Among the causes of death we notice:—Apoplexy, 4; infantile convulsions, 24; croup, 8; diphtheria, 11; scarlet fever, 12; typhus and typhoid fevers, 10; consumption, 56; measles, 2; dropsy of head, 10; infantile marasmus, 17; cholera infantum, 10; inflammation of brain, 8; of bowels, 6; of lungs, 16; bronchitis, 5; congestion of brain, 11; of lungs, 8; diarrhœa and dysentery, 20; whooping cough, 1. 178 deaths occurred from acute disease, and 85 from violent causes. 219 were native, and 122 foreign; of whom 68 came from Ireland; 50 died in the City Charities; of whom 3 were in the Bellevue Hospital, and 9 died in the Emigrant Institution.

Abstract of the Atmospherical Record of the Eastern Dispensary, kept in the Market Building, No. 57 Essex street, New York.

June 1862	Barometer.		Temperature.			Difference of dry and wet bulb. Thrm.		Wind.	Mean amount of cloud.	Humidity Saturation, 1000
	Mean height.	Daily range.	Mean	Min.	Max.	Mean	Max.			
	In.	In.	°	°	°	°	°			
15th.	30.00	.25	53	43	70	8	15	NE. to S.W	5	538
16th.	30.24	.25	53	46	70	10	17	N.W.	04	444
17th.	30.00	.18	62	48	76	9	17	N W to S W	0	530
18th.	29.70	.30	68	56	81	7	11	S. W to SE.	8	610
19th.	29.60	.15	70	60	80	9	14	W. to S.	4	580
20th.	29.86	.20	62	55	72	6	10	W. to S.	5	660
21st.	30.00	.10	68	56	80	12½	18	W. to S.W.	1	390

REMARKS.—15th, Rain A.M., clear P.M. 16th, Clear, very dry, fresh wind. 17th, Clear, fresh P.M. 18th, Variable A.M., sultry; rain commenced at 8¼ P.M., flood at 10 P.M. 19th, Variable sky. 20th, Cloudy A.M. 21st, Fresh wind A.M., very dry day, cloudy late P.M. Rain for the week, in. .7; for the week ending June 14th, in. 1.2.

SPECIAL NOTICES.

NEW YORK ACADEMY OF MEDICINE.—*The discussion on "Pelvic Hæmatocele" having been postponed at the last meeting of the Academy, it will be resumed on Wednesday, July 3d. After which,* DR. NOEGGERATH *will read a paper on "Peri-Uterine Hæmatocele."*

SECTION OF SURGERY AND SURGICAL PATHOLOGY.—*The Stated Monthly Meeting of the Section on Surgery and Surgical Pathology, will not take place as previously announced in this Journal—due notice will be given of the next meeting.*

Lectures on Ophthalmic Surgery.—

DR. JULIUS HOMBERGER, will give a Course of Lectures on the *Practice and Theory of Operations on the Eye.* Each student will have an opportunity to perform every operation several times on the eyes of animals.

For further information, apply to DR. HOMBERGER, at his Office 24 West Twelfth Street, in the forenoon before 11 o'clock.

L. Lyons' Pure Ohio Catawba Brandy.

—The undersigned beg leave to inform the public, that they have established a DEPOT IN NEW YORK for the purpose of supplying the Trade at their Cincinnati prices.

All orders promptly attended to by

G. FRANCHERE & CO., No. 12 Broadway,
SOLE AGENTS.

[COPY.]

NEW YORK, April 2, 1862.

We have recently made a careful analysis of Lyons' Catawba Brandy for Messrs. G. Franchere & Co., of this city, from Samples taken by ourselves of 857 casks, and have found it to be a perfectly pure article without any foreign admixture. We, therefore, have no hesitation in recommending it to the public, as fulfilling all the requirements of a pure Brandy for Medical and other uses.

JAMES R. CHILTON & CO., *Analytical Chemists.*

To prevent imposition, the labels on the genuine article have the Certificate of Dr. Hayes of Boston, printed on them. *None Genuine without it.*

SAMUELS & JACOB, PROPRIETORS.
85 Columbia Street, *Cincinnati.*

John W. Shedden, Apothecary,

363 Bowery, cor. 4th St.

Squibb's, Allen's, Tilden's, Herring's, and other fine preparations always on hand; also Pure Chloroform and Oxalate of Cerium prepared for us by Duncan Flockhart & Co., Edinburgh.

To the Medical Profession.—Dr. I.

Parigot has changed his residence and is prepared to receive a very limited number of patients in his country house at Hastings, on the Hudson; he can be consulted in town at Dr. Douglas' Office, No. 12 Clinton Place, on Tuesdays and Saturdays, for Nervous Diseases and Medico-Legal questions.

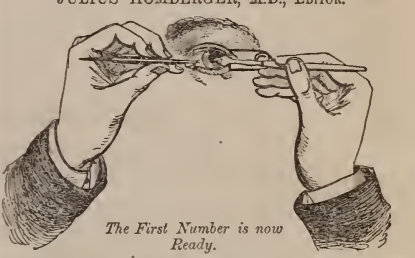
Wm. H. Davol, M.D., late Physician

to L. I. College Hospital, Brooklyn, removed to St. Paul, Minn.

References.—C. L. Mitchell, M.D., T. L. Mason, M.D., Prof. E. N. Chapman, M.D., of Brooklyn; Prof. Austin Flint, M.D., Prof. B. F. Barker M.D., of New York.

American Journal of Ophthalmology

JULIUS HOMBERGER, M.D., EDITOR.



The First Number is now Ready.

Subscription Price for one year (six numbers), $2.00; sample nnmbers 25 cents.

BAILLIERE BROTHERS,
440 Broadway, New York.

Medical Storekeepers.—The follow-

ing extract of an Act of Congress in relation to the appointment of Medical Storekeepers is published for the information of persons desirous of applying for such a position:

AN ACT to authorize the appointment of medical storekeepers and chaplains of hospitals.

"*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled*, That the Secretary of War be authorized to add to the medical department of the army medical storekeepers, not exceeding six in number, who shall have the pay and emoluments of military storekeepers in the quartermaster's department, who shall be skilled apothecaries or druggists, who shall give the bond and security required by existing laws for military storekeepers in the quartermaster's department, and who shall be stationed at such points as the necessities of the army may require: *Provided*, That the provisions of this act shall remain in force only during the continuance of the present rebellion. Approved, May 20, 1862.

II. The following are the regulations which will govern the appointment of medical storekeepers under the first section of the foregoing Act of Congress:

1. A board of not less than three medical officers will be assembled by the Secretary of War, to examine such applicants as may, by him, be authorized to appear before it.

2. Candidates, to be eligible to examination, shall be not less than twenty-five years nor more than forty years of age; shall possess sufficient physical ability to perform their duties satisfactorily; and shall present with their applications satisfactory evidence of good moral character.

3. Candidates will be required to pass a satisfactory examination in the ordinary branches of a good English education, in pharmacy and materia medica; and to give proof that they possess the requisite business qualifications for the position.

4. The board will report to the Secretary of War the relative merit of the candidates examined, and they will receive appointments accordingly.

5. When appointed, each medical storekeeper will be required to give a bond in the amount of $40,000 before he shall be allowed to enter on the performance of his duties.

By order of the Secretary of War:

L. THOMAS, ADJUTANT GENERAL.

A Board of Medical Officers for the examination of applicants will be convened in the city of Washington on the first day of July, to continue in session one month.

Applications to appear before the Board should be addressed to the Secretary of War.

Surgeon-General's Office, June 5, 1862.

Sent Free by Mail on Receipt of Price.

Consumption, its Early and Remedi-

able Stages. By Edwards Smith, M.D. 8vo. London, 1862. $3.25.
BAILLIERE BROTHERS, 440 Broadway, N. Y.

E. & S. FOUGERA, PHARMACEUTISTS,

No. 30 N. William st., N. York, and No. 169 Atlantic st., Brooklyn,

GENERAL AGENTS FOR THE FOLLOWING PREPARATIONS:

AGENTS: T. METCALF & CO., BOSTON, MASS.; H. P. WAKELEE, SAN FRANCISCO, CALIFORNIA; E. L. MASSOT, ST. LOUIS, MO.; , BALTIMORE, MARYLAND, ETC., ETC.

To be had also from the first class Drug Stores.

ALBESPEYRE'S BLISTERING TISSUE.

This Tissue is always reliable, being of a uniform strength and blistering in six hours. It is neat, handy, economical, and of a great convenience for *Physicians (principally country Physicians) Pharmaceutists*, and *Patients*. Generally used in the civil practice; it is the only one employed in the active armies and hospitals of France.

ALBESPEYRE'S EPISPASTIC PAPER, is used for maintaining blisters, in preference to any drawing ointments.

RAQUIN'S CAPSULES,

Approved by the French Academy of Medicine—Daily prescribed with success by the profession at large. These *Capsules* are superior to any similar preparations.

GENEVOIX PURE OIL OF HORSE CHESNUTS.

This ANTI-GOUT preparation is among the numerous topical applications possessed by therapeutics, the best external remedy for GOUT, RHEUMATISM, and NEURALGIA.

N.B. *It is very important*, in applying this oil, to rub gently on the inflamed part, *till the skin is completely saturated with the oil.*

E. GENEVOIX, Phen., 14 Rue des Beaux Arts, Paris.

BLANCARD'S PILLS OF IODIDE OF IRON.

Every physician, every work of medicine, regards the Iodide of Iron as an excellent preparation, uniting the properties of both Iron and Iodine.

Each pill contains one grain of Iodide of Iron, the dose is two to four pills a day. None are genuine who have not a reactive silver seal attached to the lower part of the cork, &c., &c.

BLANCARD, Phen., No. 40 Rue Bonsparte, Paris.

BONJEAN'S ERGOTINE & DRAGÉES OF ERGOTINE.

Bonjean's Ergotine, or purified Extract of Ergot, is the extractive principle of Secale Cornutum, minus its poisonous substance. In consequence, *Bonjean's Ergotine* may be given in doses proportionate to the danger of the case, without any risk for the life of the patient. The dose of *Bonjean's Ergotine* is from five to 10 grains, daily. One dragée (three grains) may be given, crushed, every two or three hours, in some grave cases of uterine hemorrhage.

LABELONYE, Phen., No. 19 Rue Bonrbon, Villeneuve, Paris.

QUEVENNE'S IRON AND DRAGÉES OF IRON
BY HYDROGEN.

Physicians desirous to have a faithful article, will prescribe *Genuine Quevenne's Iron*, which is always uniform and reliable, and quite different from the commercial Iron by Hydrogen.

It comes in small bottles, with a tin spoon containing two grains of Iron, which is a dose. E. GENEVOIX, 14 Rue des Beaux Arts, Paris.

LEBEL'S SAVONULES OF COPAIVA, &c., &c.

The unfriendly action of Copaiva on the stomach, causing nauseous eructations and gastric derangements, renders its continued employment often impossible. In Lebel's Savonules, the Balsam, by its saponification with an alcali, is modified in such a manner, that its digestion is easy and its absorption more ready, besides its elegant form and disguise under a coating of gluten, recovered by sugar as a dragee, neither offend the sight nor displease the palate.

PIERLOT'S VALERIANATE OF AMMONIA,
FOR NERVOUS AFFECTIONS.

This preparation is not at all like the one prepared by Apothecaries, after the formula published in the journals; its odor, its taste, and above all, its success, where the other one fails, will tell at once how different they are one from the other.

Genuine Pierlot's Valerianate of Ammonia is a most efficacious remedy in *Neuralgia, Epilepsy, Convulsions, Hysteria*, &c., &c.

DOSE.—Two to three teaspoonfuls daily.

PIERLOT, Phen., 40 Rue Mazarine, Paris.

BOUDAULT'S PEPSINE,

Successfully prescribed in *Dyspepsia, Gastralgia, in slow* and *difficult digestion*, in *chronic diseases*, and also to arrest *vomiting during pregnancy.*

DOSE.—Fifteen grains in powder, two or three times a day, just before eating.

LABELONYE'S GRANULES OF DIGITALIS,

Each Granule contains one-third of a grain of Hydro-alcoholic Extract of Digitalis Purpurea. This preparation is an excellent sedative, a powerful diuretic, and is perfectly acceptable to the stomach. They regulate well the *Pulsations of the Heart*, increase rapidly the urinary secretions, act remarkably well in the *Nervous Palpitations, Aneurisms*, and *Hypertrophies* of the *Heart*, in various kinds of Dropsies, principally those symptomatic to the Heart.

DOSE.—Four to ten Granules daily.

LABELONYE, Phen., 19 Rue Bourbon Villeneuve, Paris.

FRUNEAU'S ASTHMATIC PAPER.

This paper contains a determined quantity of Nitrate of Potash, Belladonna, Hyoscianus, Stramonium, and it burns well, and its pleasant fumes near the patient, in a closed room, relieve immediately all oppressions.

FRUNEAU, Phen., NANTES, FRANCE.

E. & S. FOUGERA'S COMPOUND DRAGÉES OF SANTONINE.

These Dragées compound of Santonine and Jalapine are at the same time vermifuge and purgative—being coated with sugar they are pleasant to take, even for children. Each Dragée contains half a grain Santonine and one-fifth of a grain of Jalapine, with chocolate and coated with sugar.

DOSE.—Ten to twelve a day for an adult, repeated three days.

GELIS & CONTÉ'S DRAGÉES OF LACTATE OF IRON.

Approved by the French Academy of Medicine.

The superiority of action of the *Lactate of Iron* is duly attributed to its perfect solubility in the gastric juice. It is daily prescribed for *Chlorosis, Whites, Amenorrhœa*, and general debility. Each Dragée contains one grain Lactate of Iron.

DOSE.—Two to three, three times a day.

PAULLINIA-FOURNIER,

Is daily administered as a tonic and principally for the nervous system, hence its advantageous application for *Neuralgia, Headache*, convulsions of the stomach, &c., &c. It is favorably spoken of by Drs. Trousseau, Pidoux, Grisolle, &c., &c. No. 26 Rue d'Anjou St. Honoré, Paris.

E. & S. FOUGERA'S DRAGÉES AND SYRUP OF PYROPHOSPHATE OF IRON.

The efficacy of this new preparation, containing two important elements of our system, Iron and Phosphorus, is admitted by all Physicians who have employed it. Being borne easily by the most delicate stomachs, it agrees very well with young ladies; it is used with decided benefit in cases of *general debility, Anemia, Dyspepsia, Neuralgia*, and principally where a nervous tonic is indicated.

DOSES.—Two to four Dragees, three times a day, or a dessert to a teaspoonful three times a day. For children in proportion.

PERSONNE'S IODINISED OIL.

APPROVED BY THE FRENCH ACADEMY OF MEDICINE.

This Oil, containing Iodine in an elementary combination, is very much like sweet almond oil in its taste and color; it has great advantages over cod-liver oil, as it can be administered in smaller quantity and without disgust for the patient. Ricord says: that the cure, or at least some modification of the disease, have always been obtained quicker with Personne's Iodinised Oil, than with cod liver oil. This oil is used in the same cases as codliver oil. DOSE.—A teaspoonful two or three times a day.

No. 19 Rue Bourbon Villeneuve, Paris.

E. & S. FOUGERA, Pharmaceutists, New York and Brooklyn,

GENERAL AGENTS FOR THE ABOVE PREPARATIONS.

N.B. PHARMACEUTISTS AND WHOLESALE DRUGGISTS will find it to their advantage to send for our new Price Current, in which the prices of Imported French Medicinal Preparations are much reduced.

THE

AMERICAN MEDICAL TIMES

Being a Weekly Series of the New York Journal of Medicine.

EDITED BY

STEPHEN SMITH, M.D.

ASSOCIATE EDITOR,

GEO. F. SHRADY, M.D.

VOL. V.

JULY TO DECEMBER, 1862.

NEW YORK:
BAILLIÈRE BROTHERS, 440 BROADWAY.

LONDON:
H. BAILLIERE,
219 Regent St.

MELBOURNE:
F. BAILLIERE.

PARIS:
J. B. BAILLIERE ET FILS,
Rue Hautefeuille.

MADRID:
B. BAILLY-BAILLIERE,
Calle del Principe.

1862.

Entered, according to Act of Congress, in the year 1862, by
BAILLIERE BROTHERS,
In the Clerk's Office of the District Court of the United States for the Southern District of New York.

R. CRAIGHEAD,
Printer, Stereotyper, and Electrotyper,
Carton Building,
81, 83, and 85 Centre Street.

CONTRIBUTORS TO THE FIFTH VOLUME.

Arnold, Edmund S. F., of Yonkers, N. Y.

Barker, B. Fordyce, M.D., Prof. of Obstetrics in Bellevue Hospital Medical College, N. Y., etc.
Bennet, E. P., M.D., Bridgeport, Conn.
Bennet, H. N., M.D., Bridgeport, Conn.
Bigham, J. G., M.D., N. Y.
Briddon, C. K., M.D., Surgeon N. Y. Dispensary, N. Y.
Byrne, J., M.D., F.R.S., of Brooklyn, N. Y.

Chapin, J. B., M.D., Canandaigua, N. Y.
Clark, A., M.D., Prof. of Pathology and Practice of Medicine in the College of Physicians and Surgeons, N. Y.

Davies, R., M.D., Acting Assistant Surgeon U. S. Army.
Dayton, G. A., M.D., Mexico, N. Y.
Draper, J. C., M.D., of New York.
Deslandes, P. F. C., M.D., of New York.
Detmold, W., M.D., Professor of Military Surgery and Hygiene in the College of Physicians and Surgeons, N. Y.

Elliot, George T., M.D., Professor of Obstetrics in the Bellevue Hospital Medical College, N. Y.
Elsberg, L., M.D., of N. Y.

Farnsworth, J. P., M.D.
Finnell, T. C., M.D., President of the New York Pathological Society, N. Y.
Flint, A., M.D., Prof. of the Principles and Practice of Medicine in the Bellevue Hospital Medical College, New York.

Gardner, A. K., M.D., of N. Y.

Halsted, T. M., M.D., Surgeon to the New York Hospital, N. Y.
Hamilton, Frank H., M.D., Prof. of Military Surgery and Fractures and Dislocations in the Bellevue Medical College, N. Y., etc., etc.
Heard, Dr. Lewis, Acting Assistant Surgeon U. S. Army.
Hitchcock, H. O., M.D., of Kalamazoo, Mich.
Homberger, Julius, M.D., of New York.

Jacobi, A., M.D., Professor of Infantile Pathology and Therapeutics in the New York Medical College and Charity Hospital, N. Y.
Janes, E. H., M.D., of N. Y.

Krackowizer, E., M.D., of N. Y.

Lassing, H., M.D., of N. Y.
Lee, Charles A., M.D., Prof. of Materia Medica, N. Y.
Lent, F. D., M.D., of Cold Spring, N. Y.
Loomis, A. J., M.D., Physician to Bellevue Hospital.
Lyman, F. R., M.D., late House Physician to Bellevue Hospital, N. Y.
Lyman, H. M., M.D., Nashville, Tenn.

Markoe, T. M., M.D., of New York.
Merritt, J. K., M.D., of New York.
Muse, J. A. B., M.D., Assistant Surgeon U. S. Army, New Orleans.

Niles, Addison, M.D., of Quincy, Illinois.
Nœggerath, E., M.D., of New York.
Noyes, H. D., M.D., Assistant Surgeon New York Eye Infirmary, N. Y.

O'Reilly, John, M.D., of New York.
Parigot, I., M.D., late Commissioner in Lunacy and Chief Physician of the Colony of Gheel, Belgium, etc. etc.; of Hastings, N. Y.
Parker, Willard, M.D., Professor of the Principles and Practice of Surgery in the College of Physicians and Surgeons, N. Y.
Percy, S. R., M.D., Prof. of Materia Medica and Therapeutics in the New York Medical College and Charity Hospital, New York.
Post, A. C., M.D., Professor of Surgery in the University Medical College, N. Y.

Searle, A., M.D., of Onondaga Valley, N. Y.
Sims, J. M., M.D., Surgeon to the Woman's Hospital, N. Y.
Smith, J. Lewis, M.D., Curator to the Nursery and Child's Hospital, N. Y.
Stewart, P., M.D., Peekskill, N. Y.
Studley, W. H., M.D., Acting Assistant Surgeon, U. S. Army.
Swinburne, John, M.D., of Albany, N. Y.

Taylor, C. F., M.D., of New York.
Thompson, J. H., M.D., of New York.
Thomson, W. H., M.D., of New York.

REPORTS FROM THE FOLLOWING HOSPITALS, INSTITUTIONS, AND SOCIETIES, HAVE APPEARED IN THIS VOLUME.

BELLEVUE HOSPITAL, N. Y.
FORT HAMILTON HOSPITAL, N. Y.
HOME FOR SICK AND WOUNDED SOLDIERS, N. Y.
HOSPITAL SHIP, EUTERPE, FORT MONROE.
HOSPITALS OF NASHVILLE, TENN.
MILL CREEK HOSPITAL, FORT MONROE.
N. Y. MEDICAL AND SURGICAL SOCIETY, N. Y.
NEW HAMPSHIRE STATE MEDICAL SOCIETY, VT.
NEW YORK ACADEMY OF MEDICINE, N. Y.
NEW YORK COUNTY MEDICAL SOCIETY, N. Y.
NEW YORK EYE INFIRMARY, N. Y.
NEW YORK HOSPITAL, N. Y.
NEW YORK PATHOLOGICAL SOCIETY, N. Y.
NURSERY AND CHILD'S HOSPITAL, N. Y.
SURGICAL SECTION NEW YORK ACADEMY OF MEDICINE, N. Y.
VERMONT MEDICAL SOCIETY, VT.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.

SESSION 1860-61.

BY A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

LECTURE IX.—PART III.

Eczema—Its Varieties—Etiology—Local and General Causes—Is Dentition a Direct Cause of Eczema—General and Local Treatment—Impetigo—Its Original Identity with Eczema.

You will find that the majority of such remarks as I shall have to make on the connexion between dentition and eczema, are also due to impetigo. I therefore shall speak of eczema alone, expecting to add a few words, towards the end of this lecture, on the latter eruption.

Eczema is a very frequent cutaneous disease, and again, like so many others, consists in a superficial dermatitis, serous exudation taking place on the surface of the cutis. It takes no typical or regular course like most forms of herpes, and spreads over a larger surface than herpes generally does. In this respect, it has been compared to catarrh on the mucous membrane, as in this form of disease also the surface is more affected than the subjacent tissue, the secretion being also copious and spreading considerably and rapidly. In the majority of cases the epidermis is lifted up by the exudation of eczema, and vesicles are formed; not always, however, in the like manner. In the simple eczema, *e. simplex*, or *vesiculosum*, the vesicles are of small size, and not surrounded by inflammation, and extend generally over a large surface. The contents of the vesicles are entirely clear and transparent. In the *e. impetiginosum* the contents are less transparent, more similar to purulent matter, a formation of young cells having commenced in the hitherto liquid and uniform exudation. In another form, *pityriasis rubra*, the exudation is not copious, not even enough so to form vesicles, but it will dry up soon and form scales on the hyperæmic surface. In *e. rubrum* (salt rheum) a similar process takes place; no epidermis is lifted up, no vesicle is formed, and the cutis is denuded of its epidermis, hyperæmic, and moist. In *tinea* (of the head, face, ears, lips, extremities, etc.), or *crusta lactea, milk crust*, the exudation is copious enough to form vesicles, the contents of which become dry and hard, and with the admixture of the epidermoidal scales and extraneous accidental matter, form hard, and more or less thick scabs on the surface. Sometimes, also, a thickening of the subjacent cutis takes place, like the swelling of the submucous tissue in chronic catarrhal affections of a mucous membrane.

Crusta lactea, then, is a chronic eczema, and generally not universal, but mostly confined to a single region of the surface, scalp, face, lips, etc. It is almost always a troublesome and tedious affection, is very frequently observed in children, in their first year and later, and frequently believed to be in a direct connexion with dentition. On the scalp (*e. capillitii*), the two forms, *impetiginosum* and *rubrum*, are most common. Vesicles are soon formed, but as fingers and combs will be equally busy in destroying them, they are frequently not noticed. The scalp, then, feels moist to the touch, the hair appears to be glued together, the secretion dries up, and scabs are formed, which together with new secretion, and the bundles of wet and sticky hair, prove a safe depot for dirt of any sort, and a pet refuge for lice. At the same time the cervical glands are found swelled, and even suppurating. This form of eczema, in which hard or soft, thick or thin scabs cover the scalp in the described form, was formerly known by the name of *granulated tinea favosa*, while that form, which, as *pityriasis rubra*, consisted in the formation and ejection of a large number of small epithelial scales, was called *tinea furfuracea*.

In children eczema is almost as frequent on the face as on the scalp. There, again, it assumes the same forms of *e. impetiginosum* and *e. rubrum*. Cheeks and chin appear red, have a brilliant appearance, and after a few small vesicles have been formed and broken, are moist and assume a yellowish color, beneath which the corium is found denuded and moist with serum. It is not necessary to allude to all the names formerly given to different forms and localities of this affection. It is enough to say that the same eruption will show itself on the external ear, on the eyelids, nose and lips, on the shoulders, and almost all the surface of the body, very generally complicated with swellings of the neighboring glands, and always proving, as I have stated already, either a very obstinate eruption, as far as its removal is concerned, or at all events one that is very apt to return after it has been once removed.

We shall approach our subject a little nearer by examining the causes of the eczematous eruptions, for the purpose of ascertaining how far we are justified in assuming a causal relation between eczema and dentition. Immediate irritation of the skin stands foremost amongst the causes of eczematous eruptions; hot temperature from whatever source, *e. caloricum*, influence of the sun, *e. solare*, and of warm baths, and frequently also after repeated cold baths, alternating with warm ones, etc. The "critical eruptions" of hydropathists, so much boasted of by busy doctors, and so much believed in by credulous patients of the "water-cure establishments" belong to this class. The embrocation of salves, especially mercurial, irritation by scratching, and the presence of parasitic animals on or within the skin, are also frequent causes of eczema. Many of the vesicles and pustules found on the skin during the presence of itch, are more due to the busy working of the patient's fingers than to the direct influence of the acarus scabiei. Another cause of eczema authors are in the habit of describing for such forms which are found especially on the lower extremities; they are the result of obstruction in the circulation of the venous blood, and but rarely found except in advanced age, i. e. those years of life in which venous obstructions are common and best known in the form of "abdominal plethora," chronic catarrhs of the stomach and intestines, and hæmorrhoidal swellings of the veins of the rectum. We have to exclude this form from our list, as it is not found in infantile age. But there are other causes of eczema which concern us more than almost any others. The intimate connexion of the skin with all the other organs of the system, includes the necessity of its being directly influenced by internal sufferings of any kind; chronic eruptions are, therefore, the frequent results of constitutional affections, and eczema from such causes is a frequent occurrence. Especially such children as show an excessive liability to exorbitant deposits of fat in the subcutaneous tissue, and those affected with symptoms of rhachitis and scrofula, appear to be the proper individuals for obstinate chronic eczema. This connexion between eczema, scrofula, and rhachitis, is as frequent and sure as that between inflammations of the submucous tissue and scrofula, and between rhachitis and bronchial or intestinal catarrhs. Eczema, therefore, is an almost regular companion of such children as have a white skin and soft and silk-like fair hair, whose bones are backward in their development, whose occiput is soft, and dentition little advanced, who suffer from bronchial and intestinal catarrh (the latter in the forms either of diarrhœa or costiveness), who are cross, peevish, and fretful, show slight symptoms of convulsions while remaining in their general state of health, and sudden exclamations in their sleep, and who, at the same time, show other symptoms of disorder in the organs of digestion, assimilation, and elimination, viz. large stomach, occasional colics and vomiting, and the presence of large

amounts of phosphate of lime in the urine. After all, there is no doubt that large numbers of cases of eczema depend on constitutional causes; as is well known, also, that in adult females, eczema is a frequent attendant of chlorosis and other anomalies of menstrual secretion. Even hereditary disposition cannot be entirely denied as one of the causes of eczema, but we have no reason whatever, after the investigations of Hebra, of Vienna, to further believe in the presence of a "herpetic diathesis" in all such cases of eczema which appear unexplainable by either a local or general cause.

I have stated that some cutaneous diseases must be considered as merely local affections, while others are in direct connexion with internal diseases of either local or general character. That, however, dentition, as such, should be the cause of obstinate eczema, I have had no reason to say. It is true that, during the period of dentition, viz. from the sixth to the thirtieth month, eczema is a very common occurrence. Not only, however, will eczema be found before this period, and very frequently so after the third or fourth month, when improper food has had time to show its effects, and irregular development of the cranium, brain, and scalp becomes visible in a number of symptoms; but within the mentioned time fall rhachitis, and the first symptoms of scrofula. The physiological facts to which I have frequently had to resort for the purpose of explaining many symptoms attributed to dentition, i. e. the rapid development of the cranial bones and cavity with the integuments, appear fully to explain why it is, that such children who suffer from hereditary or other predisposition, will suffer from cutaneous affections on those parts which just are the subjects of the most rapid, though in itself normal, development.

The presumed connexion of eczema of the head and face with dentition, has been one of the causes why the treatment of this affection has been neglected as being useless, and its cure condemned as injurious. Not to speak of the supposed or real relation between the same affection and the diseases of internal organs, which also has induced most authors and practitioners to consider eczema of the head and face, at certain times of infantile development, as a *noli me tangere*. This is justified, as far as diseases are concerned, to a certain extent. Good observers have noticed that soon after a sudden suppression of eruptions on the scalp, acute hydrocephalus, laryngitis, bronchial catarrh, and intestinal catarrh would show themselves, while also severe cases of bronchial catarrh would get well after the extensive appearance of eczema of the scalp and face. Nobody can prove, to a certainty, the dependency of these facts on each other, but they show enough to give the impression of there being at least the possibility of a causal correlation between them. At the same time it is desirable to remember, that the sudden suppression of a physiological or pathological secretion, to which the system had been accustomed for a long period, has been observed to be followed by a morbid secretion on some distant part of the organism. As a single instance I allude to the serous secretion of the mucous membrane of the intestinal tract after extensive combustion of the skin; and it may well be possible, that the suppression of an extensive and long continued secretion on the scalp may give rise to internal transudations. Thus, while I consider the majority of cases of eczema, as far as they do not depend on rhachitis and scrofula, as of a mostly local character, I am myself averse, not to removing cranial and facial eczema, but to removing it suddenly. By slowly suppressing a protracted secretion of this kind, we by no means disturb the equilibrium of circulation to any great extent.

To be complete, however, on this very important subject, I ought to add, that our principal modern authority on diseases of the skin, Prof. Hebra, of Vienna, is entirely opposed to considering cutaneous affections of this sort as anything but local. He first urges this point, that the local remedies applied to the skin are by no means local applications only. For it is true that the skin is not only the receiving organ for a number of other diseases (syphilis, hydrophobia, and animal poisons generally), but also, that the uninjured epidermis allows a number of medicaments, mercury, iodine, quinine, to enter the system. At all events, then, cutaneous affections are not repelled into the system, by local applications, to start again in other forms and on other places, but the effect may justly be considered a general one. Be this as it may, Prof. Hebra discards entirely all and every one of the hæmato-cathartic—blood purifying—medicines, purgatives, drastics, herbs, antimonials, baryta, graphyta, sulphur, cantharides, mezereum, viola tricolor, dulcamara, Roob de Laffecteur, Larrey's Syrup, etc. The only internal medicines he ever uses, are arsenic, mercurials, iodine, iron, cod-liver oil, amara, acids, and all such remedies as would have been given in the same case for the dyscrasic affection, no matter whether it was accompanied by a local affection or not.

I have deemed it proper to deviate a little from my subject to give in full the general views on the advisability and practicability of treatment and cure, in case of local cutaneous affections. As to local remedies used by myself in cases of eczema of the head and face, I will briefly add that they are principally alkalies, such as potassa, astringents such as zinc, tannin, and lead, and "alterants" such as white or red precipitate of mercury, saving for my future lectures on the diseases of the skin, as a subject for further investigations, the exposition of their individual indications.

On *impetigo* I have but a few words to say. Originally it is identical with eczema; but it has darker and thicker scabs, and the vesicles show white or yellowish contents. Below the scabs there is generally to be found a collection of purulent matter. I have already stated that there is a transitory development of the eczematous vesicle into the impetiginous pustule in *eczema impetiginosum*, consisting in the formation of a number of young cells in the transparent contents of the eczematous vesicles. That form in which this process commences early, and is general, is called impetigo. Therefore, it is not improper, in my opinion, which however I do not claim as original, to consider eczema and impetigo as one and the same affection, the number of cells that have been formed depending on the vulnerability and general condition of the skin, and general scrofulous disposition. Impetigo, together with glandular swellings and chronic catarrh, are the principal symptoms by which scrofula is identified. As this is so, this form of cutaneous affection deserves greatly more than the former, a general treatment directed against the original disposition and morbid constitution. That dentition is entirely out of the question, as a direct cause of impetigo, I need not add.

Treatment of Gonorrhœa.—Dr. Trask, Assist. Surg. U.S. Army, reports the treatment of gonorrhœa at Camp Downey, California:—At this camp, between the 30th August and 23d September, there were treated 65 cases of gonorrhœa. Of this number, 51 were placed exclusively on the terebinthinate powder, 8 cases on bromide iodine, and 6 cases on the ferri perchlor. The following are the results obtained at this post. Of the 51 cases treated with the terebinthine insp, the average duration of treatment was 6·12 days. The shortest period of any case was 4 days, and the longest period 17 days. With bromide iodine, eight cases were treated. The average duration of treatment was 9·5 days. With ferri perchlor. there were six cases treated, with an average of eight days.

Vermont Medical College Commencement.—The Commencement exercises of the Medical Department of the University of Vermont took place on Monday evening, June 9th. Prof. C. L. Allen delivered an address. Prof. Thayer read the list of graduates, and degrees were conferred by Prof. Torrey, acting President of the University. The class numbers 35, and is the largest graduating class by *two*.

Original Communications.

AMPUTATION OF THE CERVIX UTERI.

BEING A PAPER READ BEFORE THE NEW YORK ACADEMY OF MEDICINE, APRIL 16, 1862.

By A. K. GARDNER, M.D.,
OF NEW YORK.

The almost constant fatality which has attended upon rupture of the uterus, occurring as an accident of parturition, as well as the large percentage of mortality attendant upon those operations which have, as a part of their procedure, opened the peritoneum—either by abdominal incision, or through the uterus interiorly—have made the profession not only to shrink from gastrotomy, ovariotomy, etc., but also from all operations upon any part of the uterus. It is only within a comparatively very recent period that we have ventured to introduce anything into the uterine cavity. The paper which I read to the New York Academy of Medicine, March 3, 1858 (and now forming Lecture xxxiv. of the American edition of Tyler Smith's Lectures on Obstetrics), was the first written statement that many operations might be effected upon and within the uterus with impunity. Even now, there are a very large proportion of the profession, who look upon the introduction of the uterine sound, the stick of nitrate of silver into the uterine cavity, the dilatation of the uterine neck, and the division of the interior os aud various strictures of the cervix by the knife, as hazardous and to be reprobated; and yet these operations are of daily occurrence. Following in the same progressive path, I propose now to consider a still further advance in the therapeutical surgery of uterine diseases, and look at amputation of the cervix uteri as a curative operation for prolapsus uteri, for leucorrhœa, and, in fact, for the whole train of symptoms, local and reflected, dependent upon chronic hypertrophy, and induration of the whole or a part of the cervix uteri. Hitherto this operation has been confounded with extirpation of the uterus. The body and the neck of the uterus were considered only as descriptive appellations of two portions of the same organ, any interference with one of which was judged to be as disastrous in its results as with the other; and now, when anatomical research has demonstrated incontestably the division of the hollow organ, so long known as the uterus, into two portions, the neck and body, the errors aud prejudices of the past still remain. Then, too, extirpation originally performed only for cancer, and probably necessarily fatal, has thrown an odium upon any operation supposed to be similar, but of a less extensive character. Amputation of the neck was likewise only performed for true cancer, or for its incipient stages, cauliflower excrescence, and was in quite a proportion of cases of very little utility, and sometimes fatal. Lisfranc, however, was accustomed to perform this operation with almost universal success in cases which he called primitive cancer, but which are now known to have been only hypertrophic development.

Bennett was, I think, the first to regard prolapsus of the uterus as very rarely atrue descent of the uterus,but as almost always a hypertrophy or engorgement of the uterine neck; to remedy which, he recommended issues to be made upon it with Vienna paste, cauterizations, the actual cautery, leeches, scarifications, etc.; in short, auy and all means to produce resolution, and, thereby, restoration. In 1848 M. Hugier performed amputation for the same purpose with success. These operations were made with the bistoury, and were rendered formidable by abundant hæmorrhage. Chassaignac repeating it with the écraseur has avoided this serious complication. One of his amputated cervices weighed one ounce and a quarter (℥j. ʒiij. gr. ij.). No fatal results of the operation have, however, been reported.

The operation is a simple one. The patient placed in position—formerly upon the back, and the parts exposed with a four-valved speculum, now better still, upon the left side—with knees well drawn up, and the perineum elevated by a Sims' speculum, the labia drawn aside by an assistant, the os is to be forcibly brought into view, but not necessarily externally, by a Museux forceps, if there is not sufficient prolapsus, and the patient under the influence of chloroform, all is ready for the actual operation.*

Hugier used the simple bistoury, Chassaignac employed the écraseur. Sims found that, in a single instance, the écraseur drew in the surrounding parietes, making an irregular lacerated wound of the vagina (hereafter to be alluded to), and he, therefore, discarded this instrument, and substituted for it the scissors (which makes a species of lacerated wound restraining hæmorrhage), with which he gradually snipped off the portion required, stopping as might be requisite to arrest the hæmorrhage. When the operation is concluded, the uterus retracts to its normal position, going up like a balloon from which the ballast is removed; the hæmorrhage is arrested by styptics, the tampon, and sometimes the actual cautery, and the part left to heal by granulation, a process requiring from twenty days, usually, to five or six weeks.

Sims accidentally noting that the vaginal mucous membrane could be slid upon the parenchyma of the neck, conceived the idea of bringing the cut edges together, sliding the membrane over the stump, as the integument is slid over the stump from an ordinary amputation of the thigh, and fastening it there by metallic sutures. This happy thought, carried into execution, was followed by union by the first intention, and the time for cure is thus shortened to a week or ten days.

(Dr. G. then gave the following brief history of a case in which he amputated the cervix, the portion removed weighing ℥iv. ʒij ℈ij.)

Case.—Mrs. D., of Jamaica, L. I., of American birth, 34 years of age, and the mother of six children, all born alive; has suffered from a gradually increasing hypertrophy of the uterine neck, producing an extreme prolapsus. At her last confinement, in August, 1861, the prolapse was so great that the os was an inch or more external when she came to her time, with great hypertrophic thickening of a gristly character. After protracted suffering she was finally delivered with the forceps, Dr. Shelton, her physician, making prolonged and vigorous traction with the instrument, and the husband with the fingers of both hands inserted within the os, holding back the uterus, till a rent taking place, the head emerged. The evidence of this laceration is manifest upon the anterior portion of the amputated portion. Since this labor the os has remained out of the vulva an inch or more. Examination shows the organ two and a half to three inches in diameter, two inches out of the body, and capable of being drawn out about an inch further. The finger passes external to it under the pubes about three inches, and posteriorly five or six inches. The finger enters the os for more than one inch, and the uterine sound seven and a half to eight inches.

Placed in position, Dr. Shelton giving chloroform, Dr. Steele raising the perineum with the speculum, I gradually cut with the scissors till the amputation was effected. During the course of the operation numerous vessels were severed, some of magnitude, and the hæmorrhage was quite considerable. As each vessel was cut, it was twisted, or the hæmorrhage stopped by pressure with sponges wet in ice water; and when the operation was effected, the venous oozing was checked by a weak solution of the liq. ferri persulphatis. The organ drew up far into the vagina after the portion was removed, and in order to arrest a persistent hæmorrhage, it was necessary to draw it down into view with hooks. A vessel as large as a goose quill was then

* M. Hugier especially insists against the forcible drawing down of the uterus, so that the operation may be more easily performed externally. He thinks that what is gained in ease and convenience is at the expense of the patient, that inflammatory action is apt to follow from the traction made upon the broad ligaments.

found to be bleeding, around which a ligature was passed, which completely arrested all subsequent flooding. The parts were then brought together and secured by six silver sutures easily passed by the instrument* here presented, and the patient placed in bed, after having been upon the table and under the influence of chloroform one hour and twenty minutes.

THE DANGERS OF THIS OPERATION, I consider in the order of their occurrence to be hæmorrhage, opening of the peritoneum, inflammation.

Hæmorrhage, one would naturally suppose, would be considerable from the incised wounds made, where the amputation was performed, and rapidly too, with a bistoury as at first recommended. This might indeed be serious were the amputated portion severed at one cut, leaving a large number of vessels bleeding simultaneously. But the parts being little, if at all, sensitive, even if the patient be not under the influence of chloroform, there need be no such rapidity, and by slowly separating the parts with the knife, any bleeding vessels may be twisted or tied as might be found necessary. Owing to the peculiar gristly character of the tissue, semi-elastic and springy in its character, great difficulty is found in making the ligature remain, for even when applied with the greatest care and apparently secure, it is found to be thrown off speedily and the hæmorrhage recommencing. In view of this peculiarity, Mr. Hugier has recommended transfixing the part with a pin, around and above which a ligature may be securely fastened; the pin having the ends bent down so as to be out of the way, remaining and coming away with the general slough of the part. The ligature which I applied on the quoted case, after several ineffectual trials, but without the pin, remaining firm, although traction was made upon it daily for several of the last weeks of its remaining, has not yet come away, May 14th, while reading the proof sheets of this article, more than thirteen weeks. There is, nevertheless, some danger from secondary hæmorrhage. The use of the écraseur, as already intimated, diminishes somewhat the liabilities to both of these forms of bleeding. Any fatal result, however, is not to be feared, for the tampon may be so thoroughly applied as to render any oozing even, of blood, impossible. I have not referred to styptics other than cold, for the reason that I imagine when freely used they will so coagulate the oozing blood and serum as to prevent that union by first intention already alluded to; but should the hæmorrhage be so troublesome as to interfere with the operation, they may be called for, and will be found quite efficient auxiliaries.

Opening the peritoneum is probably the last accident that one would expect to occur, and also the most serious. I am inclined to think, on the contrary, that the probabilities of opening into the peritoneum are quite considerable, and the more so, if not being recognised, they are not guarded against. Of course, where little bits of a thickened anterior or posterior lip of the uterus are snipped off, there is no such danger, but where the entire os, hugely hypertrophied, is removed, the risk is not slight. In one case of this character which occurred to Dr. Sims, where he operated for cauliflower excrescence, he considered that it was owing to the "drawing in of the loose tissue" into the écraseur. In this case a rent was made through the cul-de-sac into the abdominal cavity, into which two fingers might easily be thrust. The torn portions were immediately united by silver sutures, and not a particle of injury was the result, although a subsequent severe peritonitis, lasting for eight days, jeopardized the life of the patient. In the case above narrated in my own practice, while cutting from anteriorly posteriorly, and the operation almost finished, I noticed what I supposed to be a sinus, and drew the attention of the gentlemen around to it. Immediately a bit of fat appeared within it which I snipped off and removed, for a moment looking upon it as an unusual deposit of fat in the subjacent cellular tissue. The instant I did so, it flashed upon me that it was omentum. I immediately finished the operation in haste, lest the case might be complicated further by the protrusion of the small intestines, which were immediately noticeable, or by the entrance of any fluids or air into the abdominal cavity. How much the subsequent condition of this patient was owing to this accident it is difficult to say, probably very little. As soon as the hæmorrhage had ceased, I closed the whole cut surface by bringing the edges of the mucous membrane together, and united them by six silver sutures. The next day, the pulse was 88, with little or no abdominal tenderness; the second day, the same; the third, the pulse had risen to 96; the fourth to 102; the fifth to 108. The abdomen was generally tympanitic, but with no tenderness upon pressure, except in the right groin a little, also in the hepatic and gastric regions. The patient was kept well under the influence of opium, although so little narcotized, that she daily directed her household matters, arranged for dinner, etc., and there was little change in the symptoms for a week or more, till an unexpected menstrual return some ten days earlier than was expected, or was usual, was accompanied by feelings of prostration, and signs of collapse, which were promptly and efficiently treated by Dr. Shelton with wine punch, a blister to the abdomen, etc., and with entire success. This menstrual flow lasted for three days, but with no extraordinary profuseness, and when it ceased the patient was very much better for this "local bleeding." The regular menstrual period came on again exactly four weeks after the operation. An attack of intermittent fever and trouble from a chronic enlargement and disease of the liver, to which this patient had long been subject, supervened to complicate the case and retard her ultimate restoration to health, although the wound healed speedily, and all local difficulty was entirely removed. When I last saw her, she had visited the city, and although somewhat debilitated by a persistence of the intermittent, was gradually increasing in vigor, and had walked several blocks and back, ridden to the Central Park, etc.

(To be Continued.)

* This hollow needle is a very simple and ingenious one, modified at my suggestion from the original English pattern, by Messrs. Tiemann & Co. It needs to be but once threaded, the wire passing through the entire instrument, handle and all; does not easily get out of order, and is very efficient, needing no needle, forceps, silk thread, or other adjunct. I have also used it in sewing up the abdominal incision in a case of ovariotomy, which I recently performed. After passing the point of the needle through the integument, the wire is slid along by means of a little slide, the button of which may be seen in the middle of the instrument.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(Continued from Vol. iv., p. 8*4.)

Now, Sir, with reference to the nature of the affection, in the first place, I believe, its first visible manifestations are to be found in the kidney, and in that sense it is a kidney disease. I do not believe, however, that this is the last step backwards in the search of causation. I believe the cause is to be sought for, in the majority of cases, in some change in the ganglionic system of nerves supplying the kidney. It is very well known that the ganglionic system governs the capillary circulation, that when the paralysis of any particular fibre supplying a particular part (as happens in a few instances in the body) occurs, or when such a fibre is divided, the vascularity of that part is almost immediately increased. The experiment has been tried upon the eye by cutting that filament of the ganglionic system which supplies it, and the organ becomes congested and inflamed. Electricity in such cases, by stimulating the vessels to contract, clears up the eye, but imme-

diately on withholding this agent, the eye becomes suffused again and is finally disorganized. Experiments of this kind have led us to suppose that congestions and perhaps inflammatory action are, in a very great degree, dependent upon the ganglionic system. It seems to me, that we are to search in it for the cause of Bright's disease of the kidney. Whether behind that again there is an agency,—whether it will be learned hereafter that the true cause is to be found in the condition of the blood, is a point which I am not now disposed to argue.

Congestions we may speak of as of three kinds:—mechanical, where the return blood is obstructed; second, active and inflammatory; and third, passive and dependent upon the nervous conditions; this latter, I think, is for the most part the parent of the kidney changes in this disease. The consequence of this congestion is to reduce the kidney to a condition in which it can no longer separate the urea from the blood in the usual quantity. Now, what it is that prevents this elimination, what the particular change in the kidney tissue is, that, associated with and caused by this congestion, prevents the purification of the blood, I do not suppose we know. All that I am able to say, is that such a condition does exist, and that without it we do not have Bright's disease. The circulation of the blood being impeded, the requisite amount of urea is not separated from it. I believe, it is universally admitted that urea exists in the blood, and is not manufactured in the kidneys; that it is the result of disintegration of the tissue, that it is a chemical combination which always goes with this disintegration; and that while the carbon of the tissues, converted into carbonic acid gas, is thrown off by the lungs, the hydrogen is converted into water, the nitrogen remains —if not all, a large proportion of it—to combine with other substances and form this urea, which must be carried off by the kidneys. This substance reaching the kidneys and finding them incapable of separating it, returns with the blood, and the blood remains contaminated by it. I suppose it is safe to say that inasmuch as urea has been found in the blood of those suffering from this disease in as large amount, in some cases, as in the urine itself, the sum and essence of the pathology is to be found in uræmia —urea in the blood.

I am aware that the question has been raised whether the urea circulates as urea, or whether it is directly converted into carbonate of ammonia. It is known to most of the members that Frerichs assumed that this conversion did take place, and that urea did not produce the unpleasant symptoms, but the carbonate of ammonia. And he further stated, that if observers would take the pains to moisten a glass rod in muriatic acid and hold it before the mouth and nose of a patient suffering from Bright's disease, they would discover the evidences of ammonia in the formation of the muriate in a cloud before the face. I had no sooner seen this statement than I put it to the test. Being then on duty at Bellevue Hospital, and having at the time a large number of students in attendance, I tried the experiment before them. Having then, as we usually have, a considerable number of persons under treatment for this affection, I found that it was true that ammonia existed in the breath of two or three out of about fifteen, but that in all the others it did not exist, or at least was not evident to the proposed test. I also found that the white cloud was formed in the same way and in about the same proportion in patients not affected with this disease. I then passed the rod around the class, and found the same to be the case in healthy persons. It seemed to me therefore that the experiment, so far as it was then and there tried, was on a sufficiently large scale to settle the fact, that many persons suffering from Bright's disease had not ammonia in the breath, and that many persons who had no disease of the kidney had the ammonia. The same experiment has been performed by other observers with the same result. Wilks states, in the Guy's Hospital Reports, that he did the same thing and with substantially the same result. He does not speak of well persons, but of hospital patients.

Bearing upon this point it seems that the experiments of our countryman, Dr. (now Surgeon-General) Hammond, are worth a good deal. After Frerichs' report had reached him, he repeated his experiments; as for example, he injected into the veins of animals urea and carbonate of ammonia, and when the kidneys were not removed from them he found that the urea produced unpleasant effects for a little time, but that they still passed off, and the animals recovered, and when the kidneys were removed that the urea produced the same unpleasant symptoms until death. He did not find that there was carbonate of ammonia in the blood or breath, but found urea in the blood in both instances if the blood were examined in the first class before it was eliminated by the kidneys. The result of his studies was to bring him to a conclusion directly opposite to that of Frerichs. It seems to me, that we can safely say that urea produces the poisonous effects and not the carbonate of ammonia. Carbonate of ammonia is capable of producing death, but urea seems equally capable of doing the same thing; and to say the least of it, it is very doubtful whether the conversion spoken of does take place. Then the word uræmia seems to be entitled to the place and the significance which it has hitherto possessed.

Now we will refer to the symptoms or manifestations of the disease. Before this body, I need not enter into a detailed or minute symptomatology, but there are a few of these manifestations that are worthy of at least a passing consideration.

I suppose we may say of the large white kidney, that generally the most significant manifestation is the appearance of the skin. And by this I mean, not the œdematous effusion, but the color of the skin, the striking paleness which is observed with a good deal of uniformity (not absolute uniformity) as the disease advances. This, however, does not seem to be a first symptom; it seems to be the result of changes that have produced a certain degree of cachexia, and it implies that the disease is of considerable duration. Still it often occurs with no other symptom, except general weakness, and where we would not be led to suspect any grave disease, except for its presence. I cannot say how many times it has occurred to me to see this complexion and find no albumen and no œdema. In the greater number of such cases, however, both make their appearance in the end, though sometimes delayed many weeks after the diagnosis has been made out from the complexion alone. This, then, is one of the most valuable indications of the disease. I could recite a number of instances where it alone existed to the end. In a case I saw not long ago, with Dr. T. M. Cheesman, a gentleman had been ill for eight weeks, and complained of nothing but weakness, so far as the general symptoms were concerned. This was the marked feature. It is true he had some pains about the limbs and joints, which were regarded as rheumatic, but these soon subsided, leaving him with a weak, frequent pulse, and that peculiar pale complexion. There was not a particle of œdema anywhere. The urine was examined by me, and no albumen was found, and no casts were detected on microscopical examination. Still this characteristic color persisted to the end. He died, however, by the rupture of a small aneurism, and the disease did not run its course completely. The post-mortem examination revealed the existence of disease of the kidney. I could recite a number of instances of the same character.

It was only a week ago that I saw, in Brooklyn, with Dr. Mitchell, a case of Bright's disease, not far advanced, but still well marked, in a lady who had died from one of the accidents of abortion, and where the complexion was the only symptom that pointed to trouble in the kidney, and it was hardly appreciated during life. On post-mortem examination, the kidneys were found enlarged, pale, and the vascularity changed, as it usually is in the large kidney, and as we have seen it represented in those drawings that have been examined.

(To be Continued.)

REPORT OF THE

WOUNDED AT THE BATTLE OF NEWBERN, N. C.

By J. H. THOMPSON, M.D.,

LATE BRIGADE-SURGEON, U.S.A.

But few battles on record, of which any surgical statistics have been kept, the numbers engaged being equal, present so many highly interesting cases, as the battle of Newbern, N.C. There is hardly any form of gunshot wound lucident to modern warfare but could be seen here, and an abundant opportunity was afforded to all surgeons present, not only to see, but to perform all the capital surgical operations which, at the present day, are considered justifiable. I regret exceedingly that I have but a few notes of the many cases which came under my observation, which are interesting not only on account of the character of the injuries received, but for the universal success attending their treatment.

On the field of battle the surgeon has to contend with many disadvantages; he is often compelled to operate in positions where he is exposed to imminent personal danger, and the operations have most frequently to be performed upon the ground, the surgeon having to stoop to his patient. He has often to take as assistants men who have never before seen an operation, for when the engagement is active there is frequently too much to be done for one surgeon to be able to assist another:—before he has finished one operation, there are probably twenty others, urgently requiring his attention, and all of which will suffer by delay. All this is calculated to excite the operator, and materially interferes with that coolness so essential to the formation of a correct judgment, and upon which the welfare of the patient materially depends. After passing from under the hands of the surgeon there is no comfortable bed to remove the patient to, nor well trained assistants to nurse and administer to his wants; but he is compelled to lie upon the ground, often wet, and, unless he has been provident enough to save his blanket, without anything to cover him, probably no nourishment for many hours, and then of a kind but little suited for him. In a few days, it may be, he is removed to a stationary hospital: he has to be carried some distance on a litter, and the remainder of the journey performed on a steamboat, or in one of those infernal machines called a two-wheeled ambulance, which must have been expressly designed as an instrument of torture. It might naturally be expected that with these manifold disadvantages, the percentage of mortality would be very large; but, I think I may state without fear of contradiction, that the same number of cases, most carefully selected from the best hospital or private practice, will not compare unfavorably with those taken from field practice. One reason for this, I believe, may be found in the fact, that our patients in field practice are, as a rule, healthy men; whereas in private practice if our patients, when they first meet with the accident, are strong and healthy, we are too apt in our endeavors to save a limb to defer the operation, until they have become considerably exhausted either by long continued pain or extensive suppuration.

The following are a few of those cases which came under the charge of Drs. Derby and Otis of the Massachusetts Volunteers, and myself, at the battle of Newbern. The general rule adopted, and which will apply without any exception to all the following cases, was, when the patient was first brought in he was given from one to two ounces of whiskey. If an operation was decided upon, no reaction was waited for, but he was at once placed under the influence of chloroform, which was administered by placing a single thickness of patent lint about three inches square over the nose and mouth, and dropping the chloroform on the lint, rarely more than one drachm being required for any one patient; no instance came under my notice of any ill effects resulting from the use of this admirable but much abused anæsthetic. Those of the profession who are opposed to the use of chloroform, ground their opposition upon the fact, that a few patients have died whilst under its influence; but we have no proof that the same patients would not have died had ether been employed instead of chloroform. Of 9000 cases reported from St. Bartholomew's Hospital, London, in which were included old and young, healthy and infirm, not one instance of death was recorded.

In the first brigade to which I was attached, Drs. Otis, Derby, and myself, attended to over two hundred serious cases, amongst which were the following:—

Captain Sawyer, 23d Mass. Vols., left leg shattered to knee by cannon-ball, joint involved in the injury, as is usual in all cases of wound by cannon-ball or shell; there was great prostration. According to the generally received opinion an immediate operation was not justifiable, but reaction should be waited for. If we were living in an age when anæsthetics were unknown, this rule would have been acted upon, as the system was already too much depressed to have stood the shock of any further pain. But happily we are possessed of an agent by which we can control not only the pain of the operation, but the sufferings attending the primary injury. Under its influence the nervous system enjoys perfect repose for a considerable time, sufficient in most cases to enable it to recover from the shock, and to prevent the subsequent irritability which always accompanies reaction in those cases where stimulants only have been employed. When our patient gradually comes from under the influence of the chloroform, he awakes to the knowledge that in the main his sufferings have passed, and that for the future he has everything to hope and but little to dread. This adds materially to the probability of a successful result, for we all know how controlling is the influence of the mind over the body. In this case, we had almost entire union by first intention, and a rapid recovery without the first bad symptom.

It may become a matter of interest at some future time to inquire, whether these immediate operations in any way protect our patients from the liability to a subsequent attack of tetanus. Although after the battle of Newbern the wounded were exposed for some days to most of the exciting causes of tetanus, not one case that I am aware of occurred in any instance where an operation had been performed. There were but two cases amongst the wounded, and they are reported at the end of the list.

Job Beman, left arm torn by cannon shot, and severe contusion over umbilical region, about four inches square; prostration considerable, but not so extreme as in the preceding case. Immediate amputation of arm (circular); no bad symptoms followed.

Private Samuel Johnson, left tibia and fibula fractured close to knee, joint involved. Amputation at the knee-joint would have been the operation selected in this case, but, unfortunately, the portion of tissue necessary to form the posterior flap was so much lacerated, that the danger of its sloughing would have been imminent. Amputation was performed at juncture of middle and lower third of femur (circular); recovery perfect.

Private D. H. Cameron, minié ball through condyles of right femur; total destruction of joint, and splintering of femur about four inches up the shaft. Immediate amputation of thigh at middle third (circular); nothing occurred to retard recovery, which was complete.

Private John S. Mayo, ball through elbow-joint, left arm. Amputation four inches above joint (circular); result successful.

Private W. H. Slack, left arm carried away close to shoulder by solid shot. Amputation at shoulder-joint, but there was such extensive laceration and contusion of soft parts as to render a successful result very doubtful.

The above cases were all operated upon by Dr. Geo. Derby, and in his official report to me, twelve days after, he states all had done, and were doing well, with the exception of Slack, in whose case everything progressed well until the tenth day, when symptoms of pyæmia appeared, and he rapidly sank.

The following were operated upon by Dr. Otis, 27th Mass.

J. E. Cushman, 27th Mass. Reg., left humerus shattered by grape shot within a few inches of the joint. It was impossible to apply a tourniquet, therefore the artery was controlled by pressure, and amputation made at the surgical neck of the humerus. The patient did well, stump cicatrising kindly; recovery perfect.

L. B. Hadley, right arm shattered by grape shot. Amputation at the middle of the shaft of the humerus; good result.

Lieut. G. Warner, right leg shattered by cannon shot. Amputation at the junction of the middle and lower third of the femur (circular); line of union antero-posterior; ligature came away on the tenth day. The patient has done well, his recovery being uninterrupted by any complicatiou.

Private Geo. A. Brown, right arm carried away by solid shot or unexploded shell. It was at first proposed to disarticulate the humerus, but Dr. Otis thought he could get a better result by sawing the bone at or a little above the surgical neck, at which point the operation was performed; subclavian compressed (operation circular); the incision healed almost entirely by first intention.

Private McGrath, right leg shattered by grape shot. There had been excessive hæmorrhage before the man was brought from the field, and his case was very unpromising. The leg was immediately amputated. For the first fortnight the constitutional symptoms were very alarming. The stump looked badly, but after that time he began to mend, and on the thirtieth day was out of danger.

Private ——, 4th R. I., wrist of right hand disorganized by canister shot. The arm was amputated by double flap. On the second day hæmorrhage occurred from the radial artery, which could not be controlled by ordinary means; the flap had to be opened, and the artery tied higher up. As usual there was too much retraction to admit of a satisfactory re-adjustment of the wound. It, however, granulated nicely, and although the man's recovery was slow it was not the less perfect.

Private L'Aimée, compound fracture of humerus with splintering of the bone high up. It was a question whether any operation short of disarticulation was advisable, but it was finally decided to saw the bone at the surgical neck; the soft parts could only be trimmed, there being barely sufficient to form a flap. Secondary hæmorrhage occurred the day after the operation. The artery was secured as high up as it could be got at. On the third day hæmorrhage returned. The axillary artery was apparently disorganized by inflammatory action. Nothing remained but to tie the subclavian artery, which was very skilfully done by Dr. Derby. For some time the patient remained in a very critical condition, but with his subsequent history I am unacquainted.

I have thus given a short history of twelve cases, not including L'Aimée, in all of which capital operations were performed under the influence of chloroform. In no instance was reaction waited for, and all were perfectly successful, although our patients for several days subsequent were exposed to wet and cold, and were imperfectly nourished.

There were but two cases of tetanus among the wounded at Newbern, both of whom died, but in neither instance had there been any operation performed; the following is their history:—

Private Patrick Sweeny, minié ball through the head of the humerus, fracturing the glenoid cavity, and lodging in the left shoulder. After receiving the injury he walked some two miles to the rear, stopping in a shanty all night; next morning he walked up to the hospital. There was great constitutional irritation, and the time had evidently passed for a primary operation; it was hoped that the system might recover sufficiently to render exsection of the head of the bone an advisable operation, but, unfortunately, on April 1st, sixteen days after receipt of the wound, symptoms of tetanus were manifested, and on April 3d he succumbed to that disease.

Private Gosman, 11th Conn. Vols. A flap of skin and subcutaneous tissue, eight inches square, were torn from the chest and epigastrium; the wound was perfectly regular in outline, and the muscles were dissected as cleanly as by a scalpel. On the eighth day he complained of stiffness in the neck, and by the morning of the tenth day he presented a classical case of tetanus, and died on the evening of the same day. It is hardly necessary for me to add, that every remedy which science has suggested was tried, in the hope of arresting the progress of this frightful disease, but, as is usual, all proved alike ineffectual.

Private Frederick Soulé. A one and a quarter inch canister shot struck near the right horn of the hyoid bone, passing obliquely across the neck, and lodging in the subscapular fossa, where it could be felt under the skin; it was removed by a free incision. The man did perfectly well for four days; there was little irritative fever and no dyspnœa. Suddenly, on the night of the fourth day, he was seized with a suffocating paroxysm, and died in half an hour. I presume he died from an acute attack of œdema of the glottis. I very much regret that we had no time to make a post-mortem examination.

Private Geo. W. Ramsay, wounded in the head by a musket ball. When the man was brought in, which was in the early part of the action, he was insensible, surface cold, breathing stertorous, pulse slow, about 40. Upon examination, I found the ball had entered about one inch posterior to the fronto-parietal suture, and about two and a half inches above the ear, on the left side, and had passed in an oblique direction from before backwards. Stimulants were freely given, the loose portions of bone removed, and the patient left, as I supposed, to die. My attention being directed during the day to patients requiring immediate aid, I did not see this man again until evening, some eight hours after he had received the injury; there was then but little change, he was unconscious, and there was that peculiar whiffing by the mouth during expiration, which frequently accompanies grave cases of compression, the eyes were fixed and pupils very much dilated. During the night there was continued convulsive action of the left arm and leg, the right side appeared paralysed; the left eye was suffused and considerably protruded. I removed a clot of blood which partially filled the wound, and laid him over upon his left side to give an opportunity for the blood to drain from the wound, and thus prevent any increased compression from accumulated fluids; the bladder was emptied by catheter, and a strong cathartic administered.

In the afternoon of the second day, there was a considerable improvement; he appeared to understand what was said to him, giving signs with his left hand; the pupils were not so much dilated. From the time he was turned over upon his side the paralysis gradually diminished, and the patient seemed to improve each hour; speech slowly returned, but was not perfect. Notwithstanding this marked improvement I considered his case hopeless, for I knew the ball to be within the cranium, and the patient thus subjected, not only to the danger arising from the compression, but to the almost certain one, inflammation, and probable subsequent softening, which the presence of such a foreign body would produce.

Imagine my astonishment, on leaving my tent on the morning of the fourth day after the battle, to see the man sitting on a log before the fire smoking his pipe. I almost believed myself laboring under an optical delusion; had he risen from the dead I could not have been more surprised. His answers to questions were given with some hesitation, but were correct and rational. From this time onward, all his functions were performed normally, and at the end of three weeks he went home on furlough. I saw him on the day he left; there was still a weakness hardly amounting to paralysis of the right side, considerable deafness, and the left eye much protruded and congested, otherwise he presented no indication of having so recently been the victim of such a severe injury.

In this case I made no exploration by probe to discover

the whereabouts of the ball, as I was satisfied from the force with which it must have entered, that it was deeply imbedded in the cerebral mass, and any interference of this nature would only light up an uncontrollable inflammation, destroying any possible chance there might be for the recovery of my patient.

Examples are by no means wanting of patients recovering from serious injuries to the brain,* but I know of no case on record (where the patient has recovered) in which the symptoms have been so alarming and the exciting cause yet remaining.

I am entirely at a loss to account for the sudden improvement in the condition of this man. It is certain the ball entered the cranium, it is equally certain that by no possible chance could it have passed out; judging by precedent, sufficient time had not elapsed for nature to accommodate herself to this new state of things. We may readily comprehend how a tumor, such as an exostosis, whose growth is slow, may be tolerated for a considerable time before any alarming symptoms are manifested; but here was an extensive laceration of the cerebral tissue, with the presence of an irritating foreign body, yet followed by no serious inflammation or entire loss of any of the functions of the brain.

825 West 23d Street, New York.

NEW INTRA-UTERINE PESSARY.

By F. S. EDWARDS, M.D.,

of New York.

Those of the profession who have paid special attention to uterine diseases, are well aware of the difficulty we have in choosing a good pessary. And although our instrument makers have drawers full of various patterns, a really useful one has yet to be made. The one figured here is, I believe, a step in the right direction, and I have so far found it very useful. I therefore, after six months' patient trial in about twelve cases, give it to the profession for their verdict. It has four good qualities, viz. cleanliness, lightness, indestructibility, and facility of introduction. The larger drawing shows its usual size with the wings closed, the smaller one is with the wings open, but is reduced one-half in size.

The instrument consists of a modification of the pessary of my esteemed friend Dr. Conant, to whose instrument I can only find one objection, its difficulty of introduction, except where the uterus is in its normal axis; and as the cases where this is the case that require a pessary are so rare, while the opposite is the rule, I claim for the present article a wider range of usefulness. The pessary is made of hard rubber (one of the most useful inventions of the present age), and consists of a central intra-uterine stem flattened, rising from a disc, to which are hinged three flat wings, which, when closed in the same axis as the stem, are not quite as large in diameter as the disc itself. A hole bored from below into the stem enables a sound or rod to be used in introducing the instrument; when the stem has entered the cervix one finger easily pushes out and sets each of the wings, which open just beyond a right angle with the stem, thus remaining open by the weight of the uterus, even if the hinges wear loose.

Should the vagina be too narrow to permit all the wings to be expanded, one may be left down, reducing the circumference considerably, and this I always do in retroversion, when the vagina is small enough to sustain the instrument by two wings alone, because I find that if the anterior wing is left down it rests flat against the urethra and makes it a "point d'appui," thus spreading the pressure over a large surface. To withdraw the pessary it is best to reintroduce the sound or rod, and shutting with a finger the wings it is easily brought away by pressing it upon the rod and withdrawing all together.

In those obstinate cases of dysmenorrhœa, dependent upon either organic, congestive, or spasmodic narrowing of the cervical canal, I have had success, when all other treatment, such as incision, dilatation, cauterization, etc., had failed; the hard rubber stem, being perfectly unirritating, seems to serve the same purpose as the tied-in bougie does in urethral stricture. If it is left in during one or two menstrual periods I have found the cure permanent. They can be procured from Messrs. Tiemann & Co., and Otto & Reynders, and I believe others.

154 West 21st Street.

* Larry, Clinique Chirurgicale, Deare, Sharp, Guthrie on Injuries of the Head, O'Shaughnessy, Dessult, Brodie, and Abernethy on Injuries of the Brain.

Reports of Societies.

SURGICAL SECTION.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, April 25, 1862.

DR. JAMES R. WOOD, CHAIRMAN.

DISCUSSION ON TRACHEOTOMY IN CROUP.

Dr. Krakowizer's *remarks continued from* Vol. iv., p. 353.

Another point meriting consideration is this: The distance from the sternum to the chin being a short one, and both these points protruding, form easily an obstacle to conducting the instruments scrupulously in the median line. I therefore lay it down as a rule, that, as far as it can be carried out, the *instruments ought to be given an angular shape.*

The operation of tracheotomy, although presenting varieties often unforeseen, and demanding great coolness and quick adaptation from the surgeon's side, is essentially *a typical operation*, and as, for example, in the operation of tying arteries, one should always have in mind certain landmarks to guide one in going from layer to layer, until the trachea is exposed.

The assistant holding the head must be instructed to devote himself exclusively to the duty of keeping the chin in the median line. It is easy, then, for the surgeon not to fall beside it himself. In fixing the skin for the incision, it is a good rule to do it by dragging it in a downward direction, by putting two or three fingers on the manubrium sterni, and keeping up the tension while the incision is made from the larynx to the incisura manubrii sterni. After the tension is removed, the lower angle of the wound will remount half an inch or so above the manubrium, and thereby always keep the surgeon in mind not to prolong the division of the deeper seated parts too far downwards, where the trachea recedes more and more from the surface, and the number and size of vessels liable to be wounded increase.

After the division of the skin and the panniculus adiposus, where there is any, the first landmark presenting itself is one or both venæ mediane colli covered by the

superficial lamina fasciæ colli. If only one is seen, by careful sighting it must be made out whether it be the right or left one, and inside of it, or between them; if both are seen, the superficial lamina of the fascia colli must be divided. It must be divided the whole length of the incision of the skin. Small anastomotic branches between both venæ medianæ may be cut, and the slight hæmorrhage be controlled by the finger of an assistant. I once met a median vein between both venæ medianæ colli, running equidistant between them, and inosculating in the arcus venosus anterior, which unites both venæ medianæ a little above the manubrium sterni.

In dividing the fascia, the rule of surgery holds here stronger than anywhere else, namely, to divide from the depth to the surface. A grooved probe cannot be made available, because if its point is inserted through a small opening in the fascia it cannot be pushed along in the median line, for its handle strikes against the chin or sternum. If its free extremity be curved, this can be remedied somewhat, but then the edge of the bistoury, whose point is running in its groove, does not form with its direction the possible smallest acute angle. The consequence is that the bistoury's cutting effect is diminished in proportion to the sinus of the angle which it makes with the direction of the grooved probe. It *pushes* the fascia rather before itself than *cutting it*, thereby dividing not nearly to the requisite extent and proportion with the incision of the skin. I have seen operators, and I have done it myself, in disappointment attempt to tear the fascia with the handle of the scalpel, or insert the blunt hooks in a small opening of the fascia, and make rude lateral tractions to enlarge the opening. It can be done, but it requires considerable force, and exposes the near-by lying veins to the danger of being torn, and giving rise to a troublesome hæmorrhage.

The plan of dividing the fascia which I have adopted since some time, is this:—With a dented pincette I raise a small cone of the fascia, which I cut at the base. In this opening I insert the point of the lower blade of a small pair of scissors, bent under an angle, in the direction of the edges.* The blade being pushed along to the required extent, and the edge carrying nothing on itself but the raised up fascia; this is divided with one stroke of the scissors.

The muscles running up from the sternum are so exposed. Frequently the edges of both sterno-hyoid muscles recede already from each other. Generally a whitish longitudinal streak marks the spot where they meet each other, if perhaps hæmorrhage has not given all the parts an equal color.

The separation of the muscles generally succeeds very easily with the handle of the scalpel. Broad, flat, blunt hooks, bent under a sharp and pretty acute angle, now hold the muscles aside, and expose the so-called præ-trachcal space.

(To be Continued.)

Removal of the Clitoris in Cases of Masturbation.—In the *San Francisco Medical Press* for January, Prof. E. S. Cooper reports two cases of masturbation in females, that were cured by the removal of the clitoris. He says:—"In the female, it would appear, judging from the results of two cases, as though we have found a remedy by surgical interference, and of such mildness and simplicity as to commend it to an early trial in all cases where the habit of masturbation threatens injury to the intellect. It consists in removing the entire clitoris, including the corpus cavernosum clitoridis and the major portion of the erectores clitoridis."

The Beach Street Museum building has recently been opened by the United States authorities in this city, and the medical charge is under the Surgeon-General of this State, for the temporary accommodation of the sick and wounded. The beautiful grounds of the Massachusetts Hospital are now studded with hospital tents, and everything is ready for the reception of the sick.—*Boston Journal.*

* Richter's scissors, as used in operations on the eyelids.

American Medical Times.

SATURDAY, JULY 5, 1862.

A MILITARY MEDICAL SCHOOL.

Whatever be the position in which the present war shall leave the country, one fact now seems certain, and that is, that we shall hereafter, for an indefinitely long period, require a large and well appointed army. If peace shall be restored immediately by a return of the revolted States to their allegiance, it is not probable that our Government would reduce its army to any such insignificant figure as that at which the rebellion found it. The defence of our immense frontier by the most approved works suggested by recent military experience, will be rendered imperative by the threatening attitude of foreign nations. This will give employment to a largely increased military force. If, however, this rebellion reaches its apparently legitimate termination, being crushed out by purely military power, in other words, if this must be a war of subjugation on the part of Government, manifestly the conquered territory must be governed by the strong arm of military power. The limit to the size of the army of occupation and defence which this condition of the country would demand, could not readily be determined. In any event, therefore, the conclusion seems inevitable that the United States Government must hereafter maintain a large and thoroughly qualified army.

In forecasting the educational qualifications of the officers of the future armies of the Republic, we may assert as a foregone conclusion, that they should be trained in the strictest schools of military science and discipline. Their preparation for duty will be no holiday task, easily acquired and as readily forgotten, but the standard of qualification will be elevated to the highest grade of military science. This war has taught us the value of a thorough military education to the commanding officer, and we shall not soon forget some of the terrible lessons. Our military schools will be increased in number, and in every department the science and art of modern warfare will be taught and illustrated by the highest order of teachers.

The present war is demonstrating the truth of all past experience, that the medical officer plays no insignificant part in the successful prosecution of great military campaigns. In whatever position he is placed, whether in camp or hospital, whether engaged in warding off disease by hygienic measures, or in treating the wounded on the battle-field, the surgeon exerts more individual power in maintaining the efficiency of an army than any other officer. This fact is gradually being recognised and acknowledged in this country, and will yet stand forth as a great central truth in our military organizations. The day when the medical officer of our army shall take that rank and position to which his eminent services entitle him is not, we believe, very far distant. But it will be hasteued or delayed according to the qualifications of the medical officer himself, and his fitness to exercise his high functions. If, while the officers of the line pass through the severest preparatory training, and enter upon their active duties

skilled in every branch of military science, the medical officer enters the service with only the poor and perhaps worthless testimonial of a doctorate, as proof of sufficient preparation, we may be sure that the latter will long occupy an inferior position.

Looking forward, therefore, to the prospective enlargement of the army, to the stimulus which this war has given to every branch of military science, and to the conditions on which will depend the rank and dignity of the army medical officer, it is important to inquire by what means the grade of the medical staff may be placed on a footing equal with that of the other staffs. There can, we think, be but one answer to this question, viz. the candidate for the medical staff must undergo a special training for his service. In making this statement, we but reiterate the experience of other Governments, as will be observed on referring to the interesting account of the English Military Medical School, by Prof. Lee, in another column. The attainment of a doctorate is but the first or preparatory step to a medical military education. At this period of the student's course of study that examination takes place which is to decide whether or not he has the prescribed preliminary education, and the requisite moral and intellectual qualities. The organization of the Army Medical School at Chatham would seem to leave nothing to be desired. The courses of study are thoroughly practical, and eminently adapted to prepare the candidate for active duty.

No one who gives the subject a moment's thought can doubt that a special system of education for the duties of the army surgeon must be established in this country, if the Medical Staff keep pace with the reforms and improvements in the other branches of the army service. Government can with as much propriety establish an Army Medical School, as a Military or Naval School, though it may be a question if all such schools would not be better conducted as private enterprises. The location of such a school should be in one of our large cities, in immediate connexion with hospitals, and if possible with a military hospital. New York City would offer the greatest clinical advantages, and, as the point of centralization of medical education, and the basis of all military movements, it would naturally become the seat of such a school.

THE WEEK.

By a recent decision of the Supreme Court of this city, it is decided that the City Inspector has not the power to dismiss Health Wardens without the concurrence of the Board of Aldermen. The Judge entered upon a learned review of the laws relating to the City Inspector and his duties, and came to a decision, from which there would seem to be no appeal. There is, however, a much shorter method of reaching the same conclusion, which the judge seems to have overlooked. The method of appointing and discharging officials in the City Inspector's office, is not that prescribed by State or Municipal laws, but is in accordance with the *common law*, which is as old as the Common Council. That law is thus carried out:—The individual Aldermen have exclusive control of all the appointments in their Wards; they nominate their political favorites, generally the lowest class of rum-drinking or rumselling political hacks, to the City Inspector, who, now having received the advice and consent of the individual Alderman to a particular nominee, forthwith nominates him to the Board of Aldermen for confirmation. It will be seen that by this law we reach the same result as by the Statute law, but in a more direct and satisfactory manner. Of the two laws, the *common law* of the New York Common Council is the more obligatory with the City Inspector, as on its faithful observance rests his own tenure to office.

—

The death of Thomas Wakley, Esq., Editor of the *London Lancet*, is announced in the last number of that journal. He died on the 16th of May, æt. 67, of phthisis pulmonalis, on the island of Madeira, where he had been spending several months for his health. Mr. Wakley may justly be considered the father of modern English Medical journalism. In 1823 he established the *Lancet* as a weekly periodical, and at once brought it into notice by his unsparing criticism of the peculiarities of the leading medical men, and his full reports of the lectures of the public teachers of that period, viz. Cooper, Abernethy, C. Bell, and others. Great efforts were made to prevent the reports of lectures from being written, and Abernethy went so far as to have all the lights in his lecture-room put out, except a dim one on his own table. A verbatim report of his lecture, however, promptly appeared; he then appealed to law, having an injunction issued against the Editor of the *Lancet*, which, however, on trial was dissolved. Mr. W. triumphed over all opposition, and succeeded in placing his journal on a firm and independent basis. During the early part of its career, the course of the Lancet, though advocating important reforms, cannot be approved; its language was coarse and often grossly abusive. Latterly, it has assumed a more dignified tone; and in the discussion of all current medical questions exhibits great ability, with a correct appreciation of the true position, duties, and dignities of the profession. Mr. Wakley held important public offices; for eighteen years he was a member of Parliament, and for twenty-three years the Coroner for Middlesex. Although he early abandoned practice, and consequently attained no position as a practitioner, still the British Medical profession must ever regard him as its warmest friend and most powerful advocate.

—

Mayor Opdyke, who defeated the Metropolitan Health Bill last winter, because it did not give him sufficient power, is now affording the citizens of New York striking evidence of his ability to legislate on health questions. Yellow-fever, of all the diseases which afflict sea-board towns, is that which people most dread, and which is most strictly quarantined. No city would, knowingly, allow cases of this disease to approach within miles of its corporate limits, and yet Mayor Opdyke, and his co-Commissioners of Health, Drs. Sayre, Gunn, Miller, and City Inspector Delavan, have deliberately passed a resolution directing that persons arriving at this Port, suffering from yellow-fever, be conveyed to the Ward's-Island Hospital. This hospital is within the limits of this city, being in the twelfth ward. It is approached by land or water; if by land, the patients would be conveyed through the streets of New York, its entire length: if by water, they would pass through almost its entire shipping. Once arrived at the Hospital, the sick would occupy a central position among our great Charities, from which this disease would be disseminated far and wide. There is but one more event that the people of this city require, to open their eyes to the fact, that all their present health organizations tend rather to afflict than re-

lieve them of contagious diseases; and that is, a desolating epidemic imported directly into the city by the Health Commissioners. The Commissioners of Emigration promptly passed a resolution forbidding the reception of yellow-fever patients into Ward's-Island Hospital.

—

Since the commencement of hostilities, not only have voluntary organizations endeavored to mitigate the sufferings of the wounded and sick soldiers, but State authorities have generally made provision for the soldiers enlisted from their respective States. In many instances, these voluntary and State efforts have been brought in collision with Government authority and control, and much unkind feeling has been excited. Now, it should be well understood, that from the moment the soldier is mustered into the service of the United States, until he is mustered out of that service, whether he is on the field or in the hospital, he is completely under the control of the General Government. Whatever voluntary societies or State authorities do for the physical well-being of the soldier, must be in aid of, and with the approbation of Government. This question has recently been settled by Attorney-General Bates. Nevertheless, we deem it a moral obligation of the General Government, under the present enormous pressure created by the immense number of sick, to invite the co-operation of Voluntary and State aid. Many of the Northern and Western States stand ready to transport hence the troops enlisted from their respective States, and provide suitable hospital and other accommodations for them. This they can do, by their own agents, to great advantage, and still act "*in aid* of the Government."

—

Brigade-Surgeon Thomas F. Perley, of Maine, has been confirmed by the Senate as Medical Inspector General of the U. S. Army. This office is second in importance only to that of the Surgeon-General. Upon the Inspector-General devolves the responsibility of organizing the new department of Sanitary Inspection. To perform this great work properly, will require the most eminent executive ability, aided by a profound knowledge of the principles of military hygiene, and practical experience in their application. There are in both the regular and volunteer service well-qualified surgeons the appointment of any one of whom to this position would have given entire satisfaction to the profession. Of Dr. Perley's special qualification for the management of this department we have no means of judging, as he is quite unknown to the public service and to the profession. We sincerely hope his appointment has been made after due consultation with those conversant with this branch of the service, and under the advice and approbation of the Surgeon-General, upon whom falls the chief responsibility for the successful working of this Bureau.

—

The Quarantine Floating Hospital is again at its anchorage in the Lower Bay of New York, and we are informed that it has been placed in charge of Dr. A. N. Bell, of Brooklyn. In making this selection of the Medical Superintendent of the Yellow Fever Hospital, the Quarantine Commissioners and Health Officers have manifested a just appreciation of their official responsibility. Dr. Bell brings to the superintendence of the Quarantine Hospital an active and remarkably inquisitive mind already thoroughly familiar with the history, practices, abuses, and the real necessities of Quarantine and Sanitary regulations. In the naval service, and during the pestilential visitation at Bay Ridge in 1856, he has seen yellow fever in all its phases. Like Dr. Harris, who inaugurated the experiment of the Quarantine Hospital Ship, we believe Dr. Bell will successfully guard both the ship and the harbor from all exotic sources of infection from yellow fever, except the southern vessels themselves, for which, of course, the Health Officers must provide.

—

The recognition of Surgeons as non-combatants has practically been adopted by both armies. This is a measure which we urged our authorities a year ago to carry into effect by a mutual agreement with the enemy. If it had been the policy of both armies, from the commencement of the war, a vast amount of human suffering would have been saved, as the surgeons would have continued their labors among the wounded, regardless of the immediate results of the battle.

Reviews.

The American Journal of Ophthalmology, Vol. I. No. 1. By Julius Homberger, M.D., Editor and Proprietor. July, 1862. New York: Baillière Brothers. Pp. 48.

The appearance of a new Medical Journal, and that too devoted to a specialty, at this critical period in the history of American medical journalism, is a phenomenon well worthy of record. Whether it betokens a clearing up of that pitiless storm which has wrecked so many staunch contemporaries, or is an evidence of the inexperience of its projector, it does not appear. In either case we feel bound to bid it a hearty "good speed" on its mission. The work consists of a *General*, *Special*, and *Editorial* department. The *General Department* contains the following articles:—On Diphtheritic Conjunctivitis, by De Graefe; the Anomalies of Mobility of the Human Eye. Art. I.—Strabismus Concomitans, by the Editor. The *Special Department* contains a report of the Universal Society of Ophthalmology, and abstracts from journals. In the *Editorial Department* the editor enters upon a defence of specialties in medicine.

The work is well printed, on good paper, and, as a whole, will make a favorable impression.

—

Conservative Surgery; with a List of the Medical and Surgical Force of New York in the War of the Rebellion, 1861–2. To which is added a Brief Notice of the Hospitals at Fortress Monroe and White House, Virginia. By Sylvester D. Willard, M.D., Secretary of the Medical Society of the State of New York, etc. Albany: 1862.

This pamphlet is to form a part of the forthcoming volume of *Transactions* of the Medical Society of the State of New York. It embraces, as its title indicates, a list of the medical men which this State has furnished to the U. S. army and navy in the War of the Rebellion. The author prefaces his paper with some most judicious remarks on conservative surgery. From the accompanying tables we learn that seventeen gentlemen from the State of New York passed the Naval Medical Board; fifteen passed the Army Medical Board; and twenty-one were appointed brigade surgeons after an examination at Washington. Following these statistics are tables containing the names, ages, schools of graduation, etc., of all the candidates who passed the State Medical Board as surgeons and assistant surgeons to regiments. Up to the 10th of December this Board had examined 468 applicants, 228 of whom were qualified as surgeons, and 137 as assistant surgeons. The great discrepancy between the numbers passed as surgeons and assistants is remarkable, if the Board established a much higher grade of qualification for the former than the latter. If of the total num-

ber examined nearly two-thirds were found qualified to act as full surgeons, the fact is exceedingly complimentary to the profession of the State. The method of examination was by a series of questions to which the candidate was required to give written answers; the document was subsequently examined, together with the testimonials of the applicant, and his qualifications were accordingly determined. The series of questions, as published, were judiciously selected, and must have thoroughly tested the knowledge of the candidate. When we reflect that more than twice as many surgeons were qualified by this Board than there were regiments, we can but regret that the sifting had not been more thorough.

Appended to these lists are the names of the volunteer surgeons who were commissioned by the Governor to serve in an emergency without remuneration. The paper closes with an interesting narration of the author's experience as a volunteer surgeon at Fortress Monroe and the White House, Va.

This paper is exceedingly valuable as a historical document, and entitles its author to the lasting gratitude of the medical profession of the State. With what care would we treasure up such a memorandum of the war of the Revolution, or of that of 1812? But of equal if not of greater historical value will hereafter be esteemed the medical record of the War of the Rebellion.

Correspondence.

VERMONT MEDICAL SOCIETY.

[To the Editor of the American Medical Times.]

This Society held its Semi-Annual Meeting at St. Alban's, Wednesday and Thursday, June 18th and 19th. The President being absent, the meeting was called to order by the Secretary, Dr. McCollom, of Woodstock; and Dr. Chandler, of St. Alban's, was elected President *pro tem.*

The record of the last meeting having been read and approved, the credentials of Dr. Benj. E. Cotting of Roxbury, Mass., delegate from the Mass. Medical Society, were read, and Dr. Cotting was invited to sit with the Society and participate in the deliberations of the same.

The credentials of Dr. E. M. Snow, of Providence, delegate from the Rhode Island Medical Society, were read, with a letter from Dr. Snow explanatory of his absence.

Dr. Stevens, of St. Alban's, moved that the Secretary transmit to the Secretary of the Mass. Medical Society the acceptance of their delegate, and an expression of pleasure in thus exchanging fraternal professional relations; and trust the interchange may mutually continue. Dr. Stevens further moved that the Secretary be requested to invite an exchange of delegates from the several Societies of the remaining New England States, and from the New York State Medical Society, to attend the annual meeting of their respective Societies.

The following gentlemen were elected members:—S. S. Clarke, M.D., Albany; W. S. White, M.D., Fairfield; H. P. Hall, M.D., St Alban's; C. G. Adams, M.D., Island Pond; J. H. Hamilton, M.D., Richford; John House, M.D., Richford; J. J. Meigs, M.D., Hydepark; S. J. Holley, M.D., Dorset; H. B. Woodward, M.D., Bokersfield; Geo. Bliss, M.D., Poultney; N. S. Goss, M.D., Georgia.

Dr. Stevens, at the request of Dr. Chandler, reported a very remarkable case of *Lusus Naturæ*, in the person of an infant, which elicited interesting remarks from Drs. Reynolds, Chandler, Morgan, and others, upon the effects of marked impressions made on the mind of the mother on the development of the fœtus in utero. The remainder of the day was occupied in an interesting discussion of the subjects of Diphtheria and Instrumental Labor.

Thursday, June 19.

The Society met pursuant to adjournment, the President, Dr. A. S. Woodward, of Brandon, in the Chair.

Dr. Belknap reported a case of interest, commented upon by Drs. Reynolds, Woodward, Morgan, Ross, and Chandler.

Dr. Rubler presented a boy suffering from *Osteo-sarcoma* of the tibia, and gave a history of the case, followed with practical remarks, and reports of cases from Drs. Woodward, Richardson, Adams, Stevens, Marsh, Clarke, and Ross. Dr. Stevens presented a case of Hydrocephalus in a child three years old, the head measuring twenty-five inches in circumference. Dr. McCollom reported a case in a boy, the head measuring forty-seven inches in circumference, with the mind clear and active. Dr. Woodward, of St. Alban's, remarked upon the treatment of Hydrocephalus by tapping, and reported cases. Drs. Marsh and Rubler reported cases successfully treated by tapping.

Dr. Rubler presented a young man, nineteen years of age, with a large aneurism in the right supra-orbital region, of eleven years' standing, caused from a blow.

Other cases of professional interest were reported and discussed, not noticed in this brief report.

The meeting was well attended, and one of much interest and profit.

HOSPITALS AT NASHVILLE, TENN.

[To the Editor of the American Medical Times.]

Sir:—The hospitals are in charge of Dr. Thurston. There are five assistant surgeons, who have charge of the patients. Dr. Thurston is the general superintendent and head of the institution. The hospitals are two in number, occupying the buildings of the Nashville University. We have our quarters in the house which was occupied by some of the professors. It is a beautiful situation on a hill in the suburbs of the city. Drs. Bowles and Segur are also here. This is by far the finest hospital in Nashville. Dr. Thurston is most admirably fitted for the position he occupies; he maintains military discipline with exactness. The buildings are clean and orderly, the supplies are inexhaustible. It is really astonishing to see how well provided this newly extemporized hospital is in everything necessary for the comfort and treatment of sick patients. I really doubt the superiority of your long established New York hospital. In the way of provisions and the minor comforts, our patients are certainly better off than the Bellevue patients. The only difference in favor of your New York hospitals consists in the fact, that they are constructed with bath-rooms, etc., which of course were not introduced in the construction of buildings intended for southern college students. Dr. Thurston is deserving of an immense amount of praise for the order and completeness of everything here. It is all his own doing. I hope your sanitary commission will do him justice in any report which may be published regarding the western hospitals.

We have received a great many favors from the agent of the Sanitary Commission at this port. The supplies which he was able to furnish have served to bridge over a great many little difficulties in the first organization and outfit of these hospitals. The Government is bountiful to profusion, but like all large bodies it moves slowly when it begins to move. At the present time it is hardly necessary to call upon the sanitary agent for any assistance whatever, so complete is the outfit and the supply which Dr. Thurston has secured.

University Hospital,
Nashville, Tenn., May 31, 1862. L.

RESIGNATION OF DR. PHILLIPS.

[To the Editor of the American Medical Times.]

Sir:—Dr. Henry T. Phillips, Surgeon of the 102d Regt. N. Y. V., has resigned, after holding the appointment one week! The cause of his resignation, the same that influenced his predecessor, viz. the ignorance of the field officers of their own duties, and their persistent disposition to intermeddle with the Medical Department. This is an

evil in several of our Volunteer Regiments, and the only remedy we know is, that the Surgeon should, on the first attempt to interfere and control on the part of the Colonel, bring him at once to a Court-Martial, and have him cashiered. Some of the regiments, we know, have suffered in their hospital department through the ignorance of the Commander in not knowing the rights of the Medical Staff, and in insisting on interference with its peculiar duties.

M. D.

FOREIGN CORRESPONDENCE.

By PROF. CHARLES A. LEE.

LONDON, June 8, 1862.

Passing over, for the present, many interesting matters I have observed in the different London Hospitals, I will present to your readers some account of the organization of the British "Practical Army Medical School" at Chatham. Having been politely favored by Dr. GIBSON, Director-General of the Medical Department of the British Army, with a letter of introduction to the professors, I yesterday took the cars at London Bridge, and after a pleasant ride of an hour and a half through a richly cultivated portion of Kent, reached Strood Station, and taking a ferry-boat crossed the Medway, and soon found myself at old Fort Pitt, the seat of the School. A more beautiful and commanding position for an establishment of this kind could nowhere be found; situated as it is, several hundred feet above the river, entirely overlooking the old city of Rochester, its majestic old Castle and Cathedral of Norman architecture; the city of Chatham, with its forts, barracks, navy-yard, arsenal, convict prison, etc., together with a magnificent region of country for many miles in extent; and the river crowded with ships of war, and numerous vessels lately engaged in the suppression of the slave-trade. The Army Medical School, I may remark, grew out of the recommendation of the Royal Commission on the Sanitary State of the Army, made in 1859; which recommendation, I believe, was the result of observations in regard to the qualifications of assistant-surgeons during the war in the Crimea. The School went into operation in 1860, with four professors, viz. T. Longmore, Esq., Professor of Military Surgery; Dr. Morehead, Prof. of Military Medicine; Dr. Parkes, Prof. of Hygiene; and Dr. Aitkin, Prof. of Pathology: with a salary of £700 sterling to each professor. An attendance of at least four months at this School is required of every candidate for admission into the medical service of the British and Indian armies. The candidate must be unmarried; at least twenty-one, and not above twenty-six years of age; must produce certificates of moral conduct and character; must labor under no mental or constitutional disease; nor any disability that can interfere with the most efficient discharge of the duties of a medical officer in any climate. He must possess a diploma in surgery, or a license to practise it, from the Royal College of Surgeons of England, Scotland, or Ireland, or the Faculty of Physicians and Surgeons of Glasgow, or some other corporate body legally entitled to grant a Diploma in Surgery, or a license to practise it. He must also possess a degree in medicine, or other legal qualification to practise medicine in Great Britain or Ireland.

If he possess the foregoing qualifications, the candidate is examined on anatomy and physiology, surgery, medicine, including therapeutics, diseases of women and children, and pharmacy. The examination is practical, and includes operations on the dead body, the application of surgical apparatus, and the examination of medical and surgical patients at the bed-side. He is also examined in comparative anatomy, zoology, and botany, with especial reference to materia medica. The names of successful candidates are then sent to the Director-General, or the Physicians of the Council of India, and communicated to the Professor of the Army Medical School, the names being arranged in three classes:—1st. Those who have passed a pre-eminently distinguished examination, arranged in their order of merit; 2d. Those who have passed a creditable examination, similarly arranged; and 3d. Those who have passed the *minimum* examination, also arranged in alphabetical order, according to merit. A statement is also furnished the professors in regard to the topics or branches in which each has excelled or fallen short, which enables the professors to carry out their instructions with a definite aim as regards each class. After passing this examination, which is a rigid one, each candidate is required to attend closely one entire course of practical instruction at the School, before being admitted to his examination for a commission, which is on—1. Hygiene; 2 Clinical and Military Medicine; 3. Clinical and Military Surgery; 4. Pathology of Diseases, and Injuries incident to military service. These courses are not less than four months' duration. This examination is conducted by the Professors, but the Director-General, or medical officers deputed by him, or the Physician to the Council of India, are generally present, and take part in it. If the candidate pass satisfactorily, he is then eligible for a Commission as Assistant-Surgeon.

While residing at the Army Medical School, each candidate receives an allowance of five shillings sterling per day, without quarters, to cover all costs of maintenance; and he is required to furnish himself with uniform, *i. e.* the regulation undress uniform of an assistant-surgeon, without the sword. There is a large military hospital in connexion with the School, now containing over three hundred patients, sent from all parts of the British dominions; thus illustrating the diseases of every climate and quarter of the globe. The School has a distinct and independent existence under the Secretary of State for War, and is governed by its own Senate. It is open to all Army Medical Officers. By the kindness of Dr. Parkes, I was shown by him every part of the establishment, and had everything fully explained to me. The museum is most extensive, and consists of four divisions:—1st. A collection of pathological anatomy, having special reference to the more prevalent diseases of the army. This is one of the most extensive, and I think the most valuable collection of morbid specimens I have ever seen; gathered, as it has been, from all parts of the world. A curator is constantly employed preparing and taking care of the specimens. 2d. A collection of specimens in geology and natural history. The Museum of Natural History is especially rich, containing many preparations and specimens not found even in the British Museum. 3d. A collection of materia medica and alimentaria, containing specimens of more important articles, both in their natural and prepared states; and of the principal seeds, grains, pulses, and other dry and prepared articles of food, from all parts of the world. 4th. A collection of plans and models of whatever is used in the army for the conveyance, support; or protection of wounded men; models of tents, hospitals, and the like. A bare enumeration of these articles would fill several pages. They readily teach through the eye, what could not be understood by description alone. The Library is very large, and contains all the standard works in every branch of medicine and the allied sciences. Attached to the Library is an ample Reading-Room, well furnished with maps, plates, prints, periodicals, etc., though I saw none from the United States among the large number on the table. Two sets of candidates for commission are ready every year; so that six months' residence at the School and Hospital is required, including courses of not less than four months' instruction by lectures. I need not add that the Lectures and Practical Instructions delivered at this School are directed exclusively to the Specialities of Military Medical Service. For example, the lectures on *Hygiene* are directed to impress forcibly on the mind of the student the whole principles on which the prevention of disease is based, not only in their scientific but in their practical aspect; and from thence the professor points out the special application of these principles to the preservation of the health of troops in barracks, garrisons, stations, camps, and on marches, both by practical instruction in the problems of Army Hygiene, and by reference

to maps, diagrams, models, instruments, and other modes of illustration. The professor of *Clinical and Military Medicine* attends to clinical instruction in the Hospital, and gives systematic lectures on the diseases of armies. His teachings at the bedside have special reference to the more prevalent diseases of armies. He exercises the pupils in drawing up accurate histories of cases of disease under treatment; and examines and practises them in various methods of diagnosis, by auscultation, the use of the stethoscope, and the application of chemical tests. He delivers clinical lectures on the cases under treatment, and illustrates the management of hospitals, as to cleanliness, ventilation, nursing, etc., and points out the hospital diets in different diseases, and stages of disease, and during convalescence.

The professor of *Clinical and Military Surgery* also gives a course of lectures of a special and practical character, having constant reference to clinical instruction in the surgical wards of the hospital. So also the lectures on *morbid anatomy* are richly illustrated by specimens, and aided by accessory methods of observation, such as carefully recorded histories of cases of the more important and severe diseases prevalent at the military stations abroad. The students are instructed practically how to conduct pathological investigations and post-mortem examinations; how to examine the viscera; and how the results of diseased processes are to be distinguished from post-mortem changes, etc. A full course of practical instruction in the use of the microscope is given, together with its application in determining the nature of diseased conditions. I counted nineteen large achromatic microscopes in use. The students are shown and taught how to arrange and manipulate the instrument; the various modes of examining objects by it; of drawing the objects seen; of measuring the dimensions of the objects examined; how to examine tissues and morbid products, and apply chemical agents for their analyses, under the microscope; and lastly, they are taught how to preserve microscopic objects. Practical chemistry is thoroughly taught, so that each student is qualified to analyse foods, drinks, poisons, soils, water, urine, blood, etc. He is also instructed in the mode of preserving specimens illustrating diseases, or comparative anatomy, or natural history, so that they may be sent home from abroad.

I have thus given a very full account of this army school, inasmuch as it will serve as a very perfect model for one of a similar kind in our own country. It is very evident that such a school is imperatively needed; especially if, as seems most probable, we shall have to keep a large army in the field, for a long time to come. Our medical schools do not, at present, furnish that instruction which is specially needed for the military service, and this will be evident from the enumeration of topics and courses of instruction pursued in the army medical school at Chatham. Indeed, it is impossible in our medical schools, as their courses are at present arranged, or even under any circumstances (inasmuch as they are particularly designed to qualify for civil practice), to furnish that kind and degree of instruction, which is needed to prepare a young man for the proper and satisfactory discharge of his duties as a military surgeon. I sincerely hope that long before I return, this subject may be so brought to the notice of our Government, as to result in the establishment and endowment of a Military Medical School, which will compare favorably with that of Great Britain.

A Surgeon's Certificate in the Western Army:—"Captain ——, Ser, I have examined Mr Josuf ——, and find him unable to go into Survis at the present time from debility of liver and disease which causes a gineri debility of the hole sistem and I think he will not be able to go into Survis under 19 or 20 days. November the 23d 1861. Dr. T. M. ——

I the presents of G. T. M—— J. P."

Chicago Med. Exam.

Army Medical Intelligence.

CHANGES IN THE ARMY MEDICAL DEPARTMENT.

Surgeon Tripler, relieved by Dr. Letterman as Medical Director of the Army of the Potomac, is ordered to duty at Detroit, Michigan.

Assistant-Surgeon H. R. Wirtz is ordered to duty on the Medical Examining Board in Washington, vice Letterman, relieved.

Surgeon Barton Randall is relieved from duty at Annapolis by Surgeon Getty, and ordered to Fort Hamilton to relieve Assistant-Surgeon R. O. Abbott at New York.

Assistant-Surgeon Abbott is ordered to Fortress Monroe to relieve Medical Inspector Cuyler.

Assistant-Surgeon George Taylor is ordered to the Army of the Potomac, to relieve Surgeon A. B. Hasson.

Surgeon Hasson is ordered to duty as Medical Director of the department of Gen. Hunter.

Assistant-Surgeon H. J. White is ordered to duty as Medical Director of Gen. Keyes's army corps, relieving Surgeon J. B. Brown, ordered to duty with the army of Gen. Banks as its medical director.

Assistant-Surgeon A. K. Smith ordered to duty as Medical Director of Gen. Sumner's army corps, vice Surgeon J. A. Hammond ordered to duty in New York, in connexion with the reception and transfer of sick and wounded arriving there.

Assistant-Surgeon S. A. Stonow is relieved from duty at Fort Washington, and ordered to report for duty in one of the Washington hospitals.

Dr. J. H. Baynes, citizen physician, employed to relieve Assistant-Surgeon Stonow at Fort Washington.

Brigade-Surgeon R. K. Browne, relieved from duty at camp, near Portsmouth, Va., and ordered to duty with the army of Maj.-Gen. Butler, Department of the Gulf.

Brigade-Surgeon O. Hewson Bache, relieved from duty in the last mentioned army, and ordered to report for duty to the Surgeon-General here.

Medical News.

Appointments.—The Senate has confirmed the following Assistant Surgeons as Surgeons in regular promotion: Jonathan Letterman, Pennsylvania; Robert O. Abbott, Pennsylvania; Thomas M. Getty, Virginia; David L. Magruder, Virginia; Wm. J. H. White, District of Columbia; John J. Milhau, New York; Horace R. Wirtz, Pennsylvania; Chas. Page, Virginia; Chas. Sutherland, Pennsylvania; Basil Norris, Maryland.

Dr. Pixers of Insterburg tells us, through *Casper's Vierteljahrschrift*, that, by means of permanganate of potash, the odor left on the hands of *post mortem* makers may be immediately and effectually removed. He has now used it with complete success for a year. The oxidizing power of this substance suggested to him its use for the purpose.—*Brit. Med. Jour.*

A Commission, consisting of the leading physicians of Pittsburgh, Pa., namely: Drs. Dixon, Coffey, McCandless, and Hamilton, sent by the Sanitary Association of that city to aid in ministering to the wants of the sick and wounded soldiers, having been furnished by the Surgeon-General with all necessary facilities, have gone to the battle-field near Richmond.

The Episcopal Seminary near Alexandria is now being fitted up as a hospital for convalescents, for which a thousand beds are being put into that building. The removal of that number of recovering patients from the other hospitals in this city and vicinity will make room for so many unfortunates in them.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.

SESSION 1860-61.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

LECTURE X.—PART I.

Diseases of Bones and Teething—Principal Effects of Rhachitis.—Age at which Rhachitis prevails.—Chemistry of Rhachitis.—Etiology.

ABOUT or a little after their first year, children begin to walk; such as are backward will be excused by the mother with their teething. Others commence to walk at, or soon after, the regular time, but their lower extremities, perhaps also the forearms and other bones, undergo very severe curvatures. Others walk at the right time, have their teeth when they ought to, but the sutures of the cranium do not close in time, the occipital portion of the cranium is softened, and symptoms of exudative meningitis show themselves. This is popularly believed to be from teething. Others have a somewhat compressed thorax, the sternum being prominent, the ribs flattened, and the points of insertion of the ribs at the sternum greatly swollen. This form of thorax, commonly called "chicken breast," is also said to owe its origin to "teething." And there will be a great many cases in adults, of scoliotic or kyphotic curvatures of the vertebral column, which will, either by themselves or others, be attributed to difficult teething in infancy.

The series of symptoms and affections which I have hitherto mentioned, have certainly a common cause, but whether teething is this cause, is another question. They, together with a number of other symptoms, constitute what has been named rhachitis, or rickets, the most constant and remarkable anatomical symptoms of which are the following:—

1. Enlargement of the epiphyses of the long tubular bones.

2. Softening of the osseous tissue generally.

3. Thickening of flat bones, skull, scapula, etc.

4. Deformities resulting from mechanical causes influencing the softened bones of the chest, pelvis, vertebral column, and the tubular bones. Those mechanical causes are principally, the action of the muscles, and the weight of the body.

5. Retardation of growth, in both bones and such portions as are in anatomical or physiological connexion with the bones: for instance, muscles, bloodvessels, nerves, and teeth.

6. Certain alterations in the pericardium, lungs, and integuments of the spleen, partly to be explained by the pressure of the deformed thorax.

7. Less constant, but highly important alterations in the nutrition of brain, spleen, liver, lymphatic glands, muscles, and other organs.

Rhachitis is eminently a disease of the infantile age, and is very rarely—in truth only in a few cases, part of which are even doubtful—found immediately after birth. The first symptoms show themselves at the age of a few months or years. A few statistical statements will suffice to give at least some information concerning the connexion between rhachitis and, particularly beginning, dentition.

Guérin found, in 346 cases of rhachitis, right after birth, 3; under one year, 98; under two years, 176; under three years, 35; under four years, 19; under five years, 10; under twelve years, 5, of this affection.

Luszinsky has the following percentages:—Under six months, 13; in another year, 20; under twelve months, 25; from one to three years, 56; from four to six years, 5; from seven years upwards, 1.

Of 1,654 rhachitical patients observed by Küttner, there were

	Males.	Females.	Total.
Under 6 months	14	4	18
From 6 to 9 months	31	18	49
" 9 mo. to 1 year	67	53	120
Under 1½ years	193	165	358
" 2 "	151	186	337
" 3 "	215	234	449
" 4 "	81	97	178
" 5 "	28	44	72
" 6 "	13	11	24
Over 6 years	21	28	49

The largest proportion of cases occur in the second year, after the protrusion of teeth has fairly commenced. The first weeks of life are almost exempt, but there have been described cases of not only early, but even fœtal development of rhachitis. Under eighteen months, the male sex appears to have the larger number of patients, while towards the close of the second year and later, the female appears to be more affected.

Extensive chemical investigations have led to the following results; that the general chemical character of rhachitical bones consists in too small an amount of the earthy salts. It is least during the height of the process, the remaining portions of the old tissue being more similar to the normal condition; the new formed "osteoid" parts, however, showing the greatest deviations. In these the amount of carbonic acid is also increased. The percentage of fat shows very little difference; indeed, with the exception of the long tubular bones, in which a large amount of fat is found in consequence of the soft medullary substance, both in the spongiose part of the bones and the dilated medullary canal. The specific gravity of rhachitical bones is generally diminished in proportion to the intensity of the process. The organic basis of the tissue has undergone no essential alteration, but the non-ossified cartilages have increased their proportion of water. The old question, whether the rhachitical bone yielded chondrin like cartilage, or gluten like bone, has finally been answered by the discrepancies of opinions being explained by the different and partially defective modes of inquiry. There is gluten, not chondrin, in rhachitical bone, which therefore ranks, not among cartilaginous tissue, but at the side of normal bone; while at the same time the increased amount of carbonic acid found in the recent rhachitical deposits places them side by side with the normal physiological process of growth.

As principal causes of rhachitis, many authors have considered either diminished introduction, or impaired assimilation, or increased elimination of phosphates. That the former assumption cannot be sustained is proved by the large amount of phosphates contained in every one of the articles of food in common use. Impaired assimilation depends on a diseased condition of one or more of the digestive organs, which, it is true, are always found disordered in a certain stage and development of rhachitis. Increased elimination of phosphates through the urine, according to Kletzinsky through the fæces also, is generally found to take place, but not always. Exceptions have expressly been stated—for instance, by Dr. Friedleben, who has found a number of instances of well marked rhachitis with no increase of the amount of phosphates in the renal secretion. He, moreover, points to the fact, that the presence of a surplus of phosphates in the urine, when proved, may just as well be the consequence as the cause of the rhachitical process. For, certainly, where ossification is prevented from taking place normally, the phosphates have to be removed somewhere from the blood containing too large an amount of them.

Altered condition of food, particularly of the proteinates, and disorder of one or more of the important digestive

organs, at a period of life in which the organism requires much and appropriate new material, are the prominent first causes of rhachitis. At the same time all such diseases and disorders which may lead to impaired assimilation and nutrition will help in bringing on rhachitis. Thus Dr. Friedleben lays particular stress on the importance of early diseases of the respiratory organs. It is true, that almost all the post-mortem examinations of rhachitical children have yielded collapse, induration, or atelectasis of the pulmonary tissue. These alterations must not be explained by the pressure of the abnormally curved ribs and costal cartilages, for those alterations are frequently found where there can be no pressure from the ribs; and experience teaches, that even the most acute processes, like pneumonia, will result in depressions and irregular configurations of the thorax. Thus in many cases not the rhachitical process of the ribs, but the morbid condition of the lungs, must be taken as the original source of asymmetry, depression, and narrowness of the chest. The frequency of pulmonary or bronchial affections, before or during the rhachitical process, appears to justify the assumption of a direct connexion between them; any serious either acute or protracted affection of the respiratory organs, necessarily involving an impaired condition of the blood from which every new tissue is to be formed. Just add thereto insufficient food wanting in proteine, narrow room, over-crowded population, bad air, and careless nursing, and you will no longer wonder at the combined result showing itself in the abnormal growth of the infantile cartilage and bone.

Original Communications.

AMPUTATION OF THE CERVIX UTERI.

BEING A PAPER READ BEFORE THE NEW YORK ACADEMY OF MEDICINE, APRIL 16, 1862.

By A. K. GARDNER, M.D.,

OF NEW YORK.

(*Continued from* p. 4.)

Hugier. in his great work on hypertrophic elongation of the uterine neck, says that there is great danger of opening both the bladder and the cavity of the peritoneum by the vaginal cul-de-sacs in these operations, especially if there be a relaxation of the superior portion of the vaginal walls, and quotes two cases where, in the practice of Langenbeck, death followed such openings by lacerations with the écraseur (p. 25), and subsequently gives directions for closing this wound with sutures, when by ill luck the peritoneum is injured (p. 164).

This danger Hugier considers to be the greatest in the posterior cul-de-sac, and gives his reasons as follows:—"The body of the uterus having very rarely completely left the pelvic cavity, its anterior face having ordinarily preserved its relations with the posterior face of the bladder, the uterine neck being in some degree alone prolapsed and elongated, the anterior (*vesico-uterine*) cul-de-sac has preserved almost its normal length. It shows a depth which varies from two and a quarter to three inches, according as the body of the uterus has more or less participated with the longitudinal hypertrophy; as the uterine neck is more elongated, and the anterior vaginal wall more completely retroverted. At all events, the inferior extremity of this cul-de-sac is situated at least two and a quarter inches above the anterior borders of the orifice of the neck, in such a manner that in the amputation of the latter there is no danger of touching it, so long as the bladder is not detached for an extent of an inch or an inch and a half, which is quite sufficient.

"The posterior cul-de-sac (*vagino-rectal*), which offers the greatest interest * * * * has followed the lengthening of the neck to its full extent, and the retroversion of the posterior wall of the vagina. Thus it descends much lower than the anterior cul-de-sac, and shows a depth which varies from four to six inches, and sometimes more.

"The inferior extremity, owing to the eccentric hypertrophy with which the under vaginal portion of the neck is affected, is seven-tenths to eleven-tenths of an inch above and behind the posterior border of the uterine neck. If the hypertrophy corresponding to the thickness does not exist, this extremity is distant from the orifice of the neck but half an inch at most.

"When the upper extremity of the posterior wall of the vagina descends below the orifice of the neck, and forms the most descending portion of the sub-vulval tumor, this cul-de-sac may descend an inch or an inch and a half below this opening, and attain even to the extremity of the tumor, from which it is separated only by the thickness of the vaginal walls, etc."

This statement corresponds with my own quite imperfect anatomical investigations of the comparative depths of the anterior and posterior vaginal cul-de-sacs, fortified, however, by the dissections of Dr. Steele, Demonstrator of Anatomy, New York Medical College (the actual comparative measurements of the peritoneal, anterior and posterior cul-de-sacs, I hope to give at some future time); and is a sufficient reason for the belief which I have expressed above, that "the probabilities of opening the peritoneum are quite considerable."

In those cases where there is simple hypertrophy of the uterine neck, or one lip only, as is frequently seen, uncomplicated by a prolapsus altering the relative positions of the various organs, this difficulty is not to be so much feared. Even when the accident does occur, the cases mentioned by Hugier and those here given, show that the danger is not really so great as would be expected. The important discovery of Sims, whereby the process of healing is not left to the slow process of granulation, but is speedily effected by union by first intention, also affects this accident most favorably, for thereby the opening is closed, the external air and all fluids prevented from entering, and the actual danger most materially lessened. From my limited experience I imagine that in many cases the opening of the peritoneum may be avoided by pushing the cervix upwards, instead of drawing upon it when cutting. Certainly the limit of the vaginal cul-de-sac may be seen, and when the duplication of the peritoneum does not run down into the neck, its division may thus be avoided. An examination of the anatomy of these morbid derangements will show that, in most cases, the peritoneum runs down almost to the very extremity of the cervix, as described by Hugier.

In this connexion we may also enumerate among the possible evils the *opening of the prolapsed bladder and rectum*. The possibility of such accidents will be readily seen by any one who makes a careful examination of the pathological anatomy of the parts. Practically, the effect of opening these organs is of little importance, except to recognise its occurrence, inasmuch as when it chances to occur they may be reunited by silver sutures, and thus form an unimportant part of the dressing of the wound, adding somewhat to its details, but not seriously complicating it, or interfering with the ultimate cure. However, whenever the prolapsus is entire, the vagina being entirely retroverted, then we may reasonably expect to find a hernia at these viscera, and the operation for amputation must be preceded by longitudinal incisions into and through the prolapsed vagina, whereby these organs are dissected out and eliminated from the protruding mass.

Finally, we have the greatest danger of the operation—subsequent *inflammation*. In fact, it is the actual danger already alluded to from opening the peritoneum. But independently of this extraordinary source of danger, there is a sufficient nucleus whence inflammation may spring in the amputated stumps. We know, how like wildfire amid the dry leaves of the prairie, a simple ulceration of the cervix uteri, or the irritation of a sound passing into the uterine cavity, or a sudden chill while the ovary is sti-

mulated by the menstrual evolution, speedily becomes inflammatory, spreading both by continuity and contiguity of tissues, until a general and often fatal peritonitis is lighted up. As a matter of course, therefore, we must look for more or less extensive general peritonitis after an operation of such magnitude as that we are now considering. As in all uterine cases, we cannot predict with any certainty the time for its appearance. It rarely appears in less time than forty-eight hours, and not unfrequently is delayed a week or more, when it springs up in consequence of the slight superadded irritation from the use of a vaginal injection, from the introduction of an exploring finger into the vagina, from the presence of fæces in the rectum, or the efforts at their removal, from the slight movement made in changing the dress or bedclothes, or from too early sitting up in bed. Hugier speaks of its occurrence many days after, when the cure was supposed perfect, in consequence of sexual intercourse. Such long deferred attacks of inflammation are, however, rarely serious. It may easily be seen that the tendency to this delayed inflammation is almost entirely prevented by the method of closing of the wound already mentioned, and its healing by first intention in the course of a few days. Indeed, this Simple procedure almost entirely strips the operation of all danger from this cause, where the hypertrophy is partial or small, and where there is no injury done to adjacent tissues and organs. Should we, however, have acute peritonitis ensuing, even with local peritoneal lesion as described, we have simply to meet it with the ordinary remedies. First are topical appliances, hot cataplasmata, and fomentations, and particularly turpentine stupes to the abdomen. I prefer cloths (wet with the ordiuary "burning fluid" of commerce) kept constantly to the abdomen, even when almost denuded of its cuticle. I believe there is an absorption of some of its properties of great curative value. The bowels may also be advantageously kept open by turpentine given by the mouth. Next, I rely upon opium, given till entire quiescence is obtained. The narcotism produced by the heroic doses, which have been, more than at present, so popular, has not seemed to me to be often advisable. Often, after I have obtained all the good effects thought possible from opium by the mouth, I have found marked advantage from its administration by enema or in suppository.

Furthermore, the case should be treated by the ordinary means for combating peritonitis springing from any cause, by leeches, sinapisms, blisters, etc. I have never found reason to use mercurials, so often beneficial in idiopathic peritonitis, and I may also say very rarely dare to use quinine. In the case quoted there was evidently a miasmatic taint complicating the disease, but knowing the very great emmenagogic properties of quinine (unsurpassed in my experience by any other medicine) I forbore its administration. When, a month after the operation, it was resorted to for an actual intermittent outbreak, the menses were reproduced, a fortnight only after their previous appearance. M. Hugier proposes as a means of *prevention of inflammation*, a preparatory counter-irritation by rubbing the upper and internal surface of the thighs with croton oil some days previous to the operation, and keeping up a vigorous crop of pustules for twenty or twenty-five days afterwards, not sufficiently, however, to excite marked pains, or fever.

Scanzoni advises less formidable amputations for less formidable diseases. He advocates the removal with the knife or scissors, of portions of the os which may be hypertrophied or in a state of chronic congestion, such as the anterior or posterior lip. He thinks this a more rapid and effective operation than the actual cautery, or the Vienna paste moxas advised by Bennet, and equally devoid of danger. In short, he proposes to do understandingly, exactly what Lisfranc did when he amputated the cervix uteri in so many cases of supposed incipient cancer, and with such uniform success, which in reality were only the simple hypertrophies now so generally recognised. He says of hypertrophy of the neck: "As for treatment, we have so often observed the small efficacy of therapeutic measures, whether general or local, that now we practise nothing but amputation of the hypertrophied portion." Sims has also acted in the same manner; and in the translation of Scanzoni, above referred to, I have stated in a note my approbation of this method of treatment, having practised it repeatedly. It may thus be seen that, in widely separated portions of the world, numerous gynecologists have adopted a similar line of practice as the result of their own observations.

A matter of some importance is *keeping the os uteri open*. In the cases of Hugier, which were left to heal by granulations, we find no mention of any attempts made to keep the os open; the natural tendency of the cicatrization by granulation which he employs being perhaps in that direction; for in the cases which he gives in very full detail, there is no mention made of any closure of the canal. This condition of things is, however, somewhat different, if not entirely reversed, by the method of dressing already given with the aim of procuring union by first intention. In the former, the process of cicatrization is not necessarily one which draws the parts together; in the latter its tendency is evidently to close the os. Sims, in his earlier cases, kept the os open by placing a piece of sponge within it, immediately after the operation. Thinking that this produced some irritation by its continual presence as a foreign body, he omitted it, and daily passed a sound through the canal. The result, in all the cases, was more or less the same. There is a marked tendency to contraction, and it is only by constant effort that the canal can be kept pervious.

There is no record that I am aware of, where *pregnancy has occurred* after the complete amputation of the cervix. It may be owing to this cause alone, for certainly we find in the otherwise normal os that sterility does occur, and that pregnancy does take place after its successful opening by division or otherwise. As we know of no reason why pregnancy should not take place in a uterus otherwise healthy, even without its normal cervix, is it unreasonable to ascribe it to this stricture of the outlet of the canal?

In the case above detailed, menstruation ceased one week before the operation, again took place about two weeks afterwards, lasting three days, gradually commencing, gradually declining, reappearing again exactly four weeks after the operation. In this case I took no pains to keep the os open. I had intended to pass the sound daily into the canal, but feared lest I might pass it through the rent in the peritoneum into the abdominal cavity. I concluded that rather than run the risk, I would take the chances of being compelled to open the canal with the knife, in case the menses were retained. The result proved that the operation was not necessary. At the present time it is impossible to say whether any operation will be necessary for the purposes indicated.

Another point worthy of notice is a statement made by Sims as a matter of practical importance, and that is respecting the size of the portion to be removed. He states that "in amputating the tonsils, it is not necessary to cut out the entire gland; the removal of a section will suffice, as a large part of the remainder will disappear by absorption. In removing an intra-uterine polypus, it is not necessary to cut the pedicle close to the wall of the uterus; if half an inch of it be left, it will disappear by the process of absorption. So in amputating the cervix uteri, it is not necessary to cut it off even with the vaginal insertion to secure a good result; if half an inch of it be left, it will still decrease by modified nutrition." If this statement is correct, it is extremely important; for if so, the dangers of opening the peritoneum, the bladder, and rectum are greatly lessened. I am not, however, prepared to accept the statement as a general one. There is little analogy between the tonsils and the os uteri. Among other differences, sometimes, after removing a large portion of the tonsils, they still do grow again, requiring subsequent operations. As yet, there is no record of any subsequent growth of the cervix requiring a secondary amputation.

Next, I have removed portions of intra-uterine polypi, not being able to get at them sufficiently to remove them entire, and yet, though much mutilated, I have been painfully conscious that their death or diminution in size was not always effected. Such a result, however, will unquestionably often happen after the age of menstruation has passed, and the statement, thus limited, may be correct.

Reasons for Operating.—It may well be asked, in view of the pains and perils, small indeed as they are, why operate at all? It is an erroneous idea, that these malformations are not dangerous; for while it is true that many women will live on, for years, without having their life apparently in any degree shortened by the affliction which they constantly bear around with them, it is yet true that death is not unfrequently the result. Hugier well catalogues the numerous train of evils which are directly caused by uterine prolapsus. Without mentioning many obvious ones, of comparatively slight importance, such as the ulceration of the exposed surface, the bladder, drawn out of its normal position, is also in a degree prolapsed, and resembles a gourd, on which a deposit from the urine is made, forming sometimes isolated calculi, occasionally ulcerating through the tissue, complicating the case with a urinary fistula—sometimes forming incrustations which line the membrane with a pink, stony coating.

Nor is this all; these patients thus afflicted are subject to peritonitis, both acute and chronic, and Hugier mentions having seen three women with this complaint attacked by some intercurrent disease, and dying from peritonitis. He also quotes another case, where fatal peritonitis ensued after the reduction of prolapsus and the use of a pessary, and in which the operation was neither difficult nor painful. Gangrene, too, sometimes attacks the exposed portion, ending in death.

Mr. Hugier asks if you can call this a simple infirmity which, even if these accidents do not occur to complicate the case, is yet a burden for life? Up to a certain point, indeed, the wealthy lady may take such hygienic care of herself as to make herself comfortable, avoiding labor, exercise, and active pleasures; but the poorer woman, who lives a life of toil, the washerwoman, the wife of the artisan and mother of a family, cannot keep this tumor reduced, and the prolapsus speedily becomes a matter of the utmost seriousness, interfering with micturition, defecation, even with locomotion, weakening and exhausting the system by profuse leucorrhœas, excessive menstruations, and metrorrhagias, and by the prostrating effects of the continued discharges of pus and mucus from the ulcerated surfaces, kept constantly irritated by the urine, fæcal matters, and frictions to which it is subjected.

If to this picture, which is far from being too highly colored, for it is only the faithful description of actual facts, there be added the serious inconveniences which arise from the deprivation of the use of the sexual apparatus, and being exposed to all the inconveniences and accidents which this forced continence occasions; if, besides this, the sad calamity is superadded, of being an object of repulsion and disgust to him with whom in delightful intimacy the woman should live, we can comprehend her ardent desire to be delivered from this load; and it is the duty of the physician to neglect no means to restore her health, to shelter her from such serious accidents as are liable to occur, while at the same time he restores her to society.

Furthermore, there is not in reality the danger to life which is generally supposed to exist. Hugier has operated in fourteen cases with but one death, and in this the post-mortem showed that there was not the slightest inflammation of the uterus or its appendages, or of the peritoneum, and that death ensued from disease in the brain accidentally supervening. Chassaignac has operated six times with the écraseur, and with uniform success. Sims has also operated in twenty-seven cases.

As is apparent, I have not in this paper attempted to make a complete history of this disease, the failure or success of its cure by medical agencies, nor even any full detail, either of the operation in general or the case given in particular. I have merely sought to draw attention to a comparatively new method of treating an old complaint, showing its successes and its dangers, giving such thoughts of my own as seemed to be worthy of consideration in this connexion, but principally to add another flower to the garland crowning the brow of our fellow member who has done so much to perfect the treatment of the surgical diseases of women.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from page 5.*)

Probably the next most frequent occurrence in the large kidney is the œdema, which, it is said, generally begins in the face, or is noticed first in the face and afterwards in other portions of the body. It has been said that the œdema from Bright's disease can be distinguished from that accompanying cardiac affections by the fact, that the latter first makes its appearance in the feet, and the former in the face. This, I am prepared to say, is a delusive statement, except in the more acute forms. The œdema of Bright's disease occurs in the feet sooner than in the face, in a great many cases—certainly in so large number, that if we adopt that view, we shall be often misled.

This œdema, as is very well known, sometimes becomes enormous, and the patient becomes so "water-logged," that his locomotion is almost entirely prevented, and his life becomes a burden to him. In the majority of cases, however, it does not reach that extreme degree. It is well known that it sometimes ruptures the skin. Here I may remark, that it is the result of my observations, that when these spontaneous openings occur, they are far less likely to be followed by inflammatory action than when the lancet is used. It seems as if nature were safer in her method than the surgeon with his. This œdema, then, being of frequent occurrence and of considerable importance in itself, it would be agreeable to me if anybody could explain its nature. Why does uræmia produce this dropsical condition of the whole body? It is mainly in the connective tissue that this effusion takes place; the cavities are not so frequently affected, or rather are very partially filled. It has been said, that it is in consequence of the blood being watery, from the absence of albumen; but the œdema occurs, in some cases, before the cachexia shows itself, while in other cases, even when the cachexia is present, no œdema exists. This reason does not seem to be sufficient to account it. It has been stated, that the dropsy is caused by the stimulation of the capillary vessels by the excess of urea in the blood. I do not well see how the œdema could be the result of any kind of stimulation with which we are familiar, unless it be of an inflammatory character. While on this subject, I may say again that this anasarca is not seen in some of the cases in which the kidneys are found, after death, large and pale, and I repeat it for the sake of adding, that in some of the instances in which general œdema does not exist, a little watery exudation under the conjunctival lining of the lower eyelid may be noticed, giving the appearance of a tear in the eye. This fact is referred to by Goodfellow.

The amaurosis that occurs in the progress of Bright's disease is one of the very interesting features of it. It is not of very frequent occurrence, presenting itself, perhaps, in one in every eight or ten cases, usually attacking both eyes in about the same degree, and in certain instances improving as the general symptoms improve. It appears as a sort of blur or indistinctness in the vision. The patients complain that while reading, the letters run together, and this increases until they are unable to distinguish, in some instances, the figure of a person that is before them. Hearing that this blindness, complete or partial—it is rarely

absolute—was dependent upon fatty degeneration of the retina, I asked one of the gentlemen who is familiar with the use of the ophthalmoscope, Dr. Noyes, to be good enough to examine two persons that I sent him, having this infirmity; and he reported that in both instances there were large shining spots in the bottom of the eye, which were due to fatty degeneration. So far as our knowledge goes regarding this degeneration, I suppose we are warranted in calling it fatty, and also in saying that this fat will be removed if the symptoms of the disease in general are found to subside; otherwise, this defect of vision seems to be permanent. Why the eye should be selected as the seat of fatty degeneration, in the progress of Bright's disease, is certainly a mystery; and I am not yet prepared to say whether this amaurosis ever occurs in any other forms of the disease except in the enlarged kidney. I cannot remember an instance in the small or contracted kidney. My impression is, that it is nearly, if not wholly, confined to the first form of the disease.

There is another feature of this affection that will engage the attention of the physician, and not unfrequently subject him to the most serious anxiety—it is the occurrence of sudden œdema of the lungs. That œdema should occur in the lungs is not surprising, if we admit its existence in other parts of the body, but, that it should occur unexpectedly, that it should commence and reach its height in ten minutes, and produce an amount of dyspnœa that seems to threaten life; that it should continue for one, two, or three hours, and then abate; or sometimes persist for days, or destroy his life in a much shorter period; or subside and recur at the same hour on the next day, or at a distant period, presenting always the same threatening aspects, is one of the circumstances which is known to belong to this disease, but for which I cannot find a satisfactory explanation. It is true that the severest sufferings from this cause are noticed in those who have disease of the heart as well as Bright's kidney, so that the occurrence of a distressing dyspnœa in the course of the latter affection would render it probable that heart disease accompanies it. Still, uræmia alone can produce the œdema, though usually less frequently and less severely.

There is another form of dyspnœa which occurs in the same connexion—it is a mere nervous dyspnœa, a feeling on the part of the patient that he cannot breathe, when in truth there is no physical obstacle; as if there were a certain degree of paralysis of the nerves that govern the muscles in respiration, compelling him to make it a voluntary act.

Another symptom very common and interesting to me is the dyspepsia, and I may associate with it, perhaps with propriety, the vomiting and flatulency that occur in this affection. Very few cases of Bright's disease run their course, if my experience can be relied on, without the production of very marked dyspepsia, and that almost always of the flatulent variety. As to the vomiting, a very considerable number of persons vomit so much that nutrition and medication are very materially interfered with. Very many times dyspepsia and this vomiting are associated with a sense of oppression, and not unfrequently of fulness, or sometimes of emptiness across the epigastric region, and this will remain not unfrequently for weeks and months together, and continue through times when there is not a great deal of flatulency. Goodfellow advocates the opinion that the dyspepsia and flatulency are to be attributed to the circumstance that the urea is separated from the blood in the stomach, and to a certain extent neutralizes the gastric juice. How true this statement is, and whether there have been any experiments made to prove its correctness, I am unable to say. The concurrence of these symptoms with Bright's disease is worthy of further investigation. Vomiting is so frequently associated with flatulency, that it sometimes assumes a projectile character—Goodfellow calls it explosive vomiting.

In two instances which have come to my knowledge, and which are recorded in the thirty cases already spoken of, vomiting has been, together with these distressing sensations, almost the only symptom. It may, perhaps, not be unprofitable to refer to these cases.

A patient sixty-eight years of age, a farmer by occupation, who had been a hard worker, and at the same time a pretty free drinker, began to suffer about two years before his death with flatulency and occasional vomiting. Gradually the complexion changed, and became of the peculiar kind that I have just now been attempting to give an idea of, so that during nearly the whole of the last year of his life, the physicians who saw him were of the opinion, in consequence of the vomiting, that he had cancer of the stomach. I saw him two months before his death. I was of the same opinion. The vomiting soon became so considerable that he had to be nourished by injection. When he died, and we came to the post-mortem examination, I could not divest myself of the idea of cancer. But none was found. The mucous membrane of the stomach was somewhat thickened, but not more so than we should expect in a person accustomed to drink freely. Nothing was found at the post-mortem examination that would account for his death, but the disease of the kidney to which I have alluded, and we were compelled to say that the vomiting was sympathetic and symptomatic, and yet really the cause of his death.

Another person in Bellevue Hospital, a woman, I have the history of. She was received in the phthisis ward under the supposition that she had consumption. I could discover in her no tubercles, and I consequently caused her to be transferred to another ward. I made a great many examinations of her, but could discover no serious disease, and was inclined to the opinion that she was a malingerer, who was only waiting for warm weather to come—it then being winter. She had no symptoms, except that it was said she vomited occasionally. About four or five weeks before her death, the report was that the vomiting was increasing, and I accordingly studied the case anew. It was really the only symptom of which she made any complaint. I now for the first time was impressed with the idea that some grave disease existed. There was no œdema, no difficulty of breathing, only this vomiting, with the sense of distress across the region of the stomach. The urine was not examined, for at that time I had not learned to suspect Bright's disease from such symptoms alone. This woman died, and when the post-mortem examination was made, the kidneys were found to weigh seven ounces each, to be partly fibrous and partly of the white variety.

(To be Continued.)

New England Soldiers' Relief Association, No. 194 Broadway, N. Y.—This Association, representing the Sons of New England resident in the City of New York, was organized—"*To procure the necessary means, and to provide suitable care, attendance, and accommodations for the sick, disabled, and wounded New England Soldiers, as they pass through the city on their way homeward from the War.*" Medical Board: E. R. Peaslee, M.D., *President;* Lewis A. Sayre, M.D., *Vice President;* W. R. Donaghe, M.D., *Secretary. Visiting Surgeons*:—Drs. F. J. Bumstead, W. R. Donaghe, E. R. Peaslee, H. B. Sands, L. A. Sayre, W. H. Van Buren. *Visiting Physicians*:—Austin Flint, A. K. Gardner, Horace Green, E. W. Lambert, B. W. McCready, A. Underhill, J. Worster. Alfred North, M.D., *Resident Surgeon.*

Government has taken possession of the Churches of Washington and Alexandria for the purpose of converting them into hospitals. It is stated that they are to be used only for convalescents, to relieve the crowded condition of the regular hospitals, and also provide for any emergency following a great battle.

Maine Medical School.—This school has recently received a donation of $1000 from an old pupil, Dr. Seavey, of Bangor, to be expended on the Anatomical Cabinet. The attendance upon lecturers this year has been larger than usual, showing that the school is unusually prosperous.

Reports of Hospitals.

HOME FOR SICK AND WOUNDED SOLDIERS.

U. S. MILITARY HOSPITAL.

LEXINGTON AVENUE AND 51ST ST., N. Y.

The U. S. Military Hospital, better known as the Ladies' Home for Sick and Wounded Soldiers, was dedicated with appropriate ceremonies on the 2d of May last, since which time about 360 patients have been admitted, 210 remaining under treatment. The Medical Director is Dr. A. B. Mott; the House Surgeons, Drs. A. E. M. Purdy and John W. Robie. The institution contains six wards, and when very crowded, a seventh ward is at the disposal of the directors. It has been found necessary, since the 25th of last June, to erect immediately opposite the hospital, on high and rocky ground, six hospital tents, making two wards, each of which contains eighteen patients. These are accommodations intended for convalescents.

The usual number of cases of gunshot wounds that have been treated, have been generally confined to the lower extremities. The frequency of such wounds in the lower parts of the body has been often enough noticed in the present campaign, and proves that the order to the enemy to "fire low" is pretty generally observed. The amputations that have been performed have been twelve in number, and some of them are of sufficient interest to merit a detailed report, which we hope they will receive from those gentlemen who have had them in charge.

The cases at present in the hospital which are perhaps of most interest, are those of fever. This fever is, according to Dr. McCready, the present Attending Physician, simply due to malaria, although it possesses many of the symptoms which attend the typhoid. Diarrhœa is an almost constant symptom, and lasts, in most instances, during the whole disease, from four or five days to as many months. Delirium is occasionally noticed in the severe cases. Then again, the rose-colored lenticular spots, which are considered by many characteristic of typhoid fever, exist in almost every case; they are elevated, and readily disappear on pressure. The time of the appearance of this eruption is not known, as all those cases which have it are not admitted until it is fully developed. As distinguishing this form of fever from the true typhoid, there is noticed a marked disposition to exacerbations, and sudden collapses, which may take the place of the exacerbations. A patient may be doing well, his pulse frequent but full, his mind clear, his tongue clean and moist, when in the course of perhaps three or four hours, and in many cases in a much shorter time, the pulse will disappear from the wrist, and the cutaneous surface be moist and cold, death ensuing in a few hours. The tongue in the mild cases is moist and slightly furred, while in those of a more severe form of the disease it is dry and disposed to crack. The mind is generally clear to the last; and it is not uncommon when there is not the slightest pulsation in the radial artery, for the patient to talk intelligibly, and feel himself well enough to sit up. The appetite is generally pretty good. When asleep the aspect of the patient is similar to that presented by a desperate case of typhoid fever, the decubitus is dorsal, the skin of that peculiar flushed color, the breathing accelerated, lips dry, and the sclerotic conjunctiva plainly visible through the half-closed eyelids; yet if that patient be aroused, the brightening up of his countenance and the animation of his manner are as surprising as they are sudden. He will answer questions without the least hesitation, and seem not at all annoyed by the disturbance. Scorbutus is rather a common complication, and inflammation and subsequent suppuration of the parotid gland have been noticed in four or five instances. This latter complication is said to be frequently met on the Chickahominy.

The fever seems to be caused solely by a residence in miasmatic districts, while the scurvy can without doubt be attributed to scanty fare and overwork.

The prognosis of the disease is good, except when cases come in in a very reduced condition.

The general treatment consists in the administration of quinine in three-grain doses every three or four hours, with the requisite amount of stimulants and beef-tea. When the skin becomes moist, the salt is given in doses of ten grains once a day, followed by five-grain doses every three or four hours. When the stomach is irritable, or the patient much reduced, the quinine (ten grains) mixed with starch is given per rectum twice during the day. As soon as the patient begins to "flag," stimulants are administered in increased quantity, brandy, milk punch, port wine, or whiskey being used, according to individual indications. The quantity of stimulants used varies from four ounces to fourteen in the twenty-four hours. When the diarrhœa is an urgent symptom, opium is administered, and the stimulant which seems to agree best with these cases, on account of its astringent effect, is the port wine. The scurvy is treated, in connexion with the other remedies, with raw potatoes, and milk, oranges, lemons, lemonade, etc.

No opportunities for post-mortem examination in these cases have been as yet afforded.

Simple chronic camp diarrhœa prevails to a considerable extent. Opium and tannin, however, generally serve to remedy the disease, but if they fail, the following injection has been found to be almost infallible:—Sulph. morphine, one-half grain; subnit. bismuth, ten grains; starch, one pint.

There have been some cases of rheumatism, which of course were placed upon the alkaline treatment. They all recovered.

The culinary department, being under the exclusive charge of the ladies, is most excellently managed. The fare is of the choicest kind, and is served up in a manner to entice the most capricious appetite. On the whole, we will venture to say, never were soldiers better cared for.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, April 16, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. GARDNER'S PAPER ON AMPUTATION OF THE CERVIX UTERI.

Dr. Sims, in reference to the mortality of the operation, was sorry to state that a fatal case had lately occurred in his own practice. The operation was performed at the Woman's Hospital about two weeks before, in the presence of Dr. Bulkley and other gentlemen, for hypertrophy of the cervix. The patient was 26 years of age, and had been treated in the institution for three or four months without any benefit, and out of the hospital various means had been resorted to for some time previous to her admission. At last, amputation of the cervix was determined upon. The operation was performed in the way described by Dr. Gardner, and everything progressed favorably for five or six days. She was then taken with a chill, and other symptoms of metro-peritonitis supervened. No alarm was felt until the patient had been sick a week, when a new set of symptoms set in, which indicated the presence of inflammation of the left pleura. This complication resulted in death. He inclined to the belief that the overcrowded state of the Hospital tended more than anything else towards the fatal termination of the case, inasmuch as many of the most trifling operations performed within the last two weeks were attended with metro-peritonitis, and other like grave complications. He did not think it was possible, in the great majority of cases, for conception to take place after amputation, owing to the contraction which follows. The only case which had come under his observation bearing upon this question, was that of a lady who had borne seven or eight children, but who, at the time of entering the Hos-

pital, was suffering from hypertrophy of the uterus, but more especially the cervix. At that time Dr. S. was in the habit of removing first the anterior portion of the neck, and then, after allowing an interval of a month or two, the posterior portion. The first operation had been performed, when the patient conceived at her next monthly period.

Dr. Barker, while he always had before him a fear of taking up too much of the time of the Academy, nevertheless, on this occasion deemed it his duty to make a few remarks on a subject to which he had devoted a good deal of attention. He desired more particularly to examine into some of the points on which he was inclined to differ with the author. In regard to the character of the enlargement of the cervix referred to in the paper, and the proper treatment for its cure, he did not suppose there could be any difference of opinion. The case related and specimen shown was the most remarkable instance of the kind that he had ever seen or read; in fact, he had not met with anything that would even compare with it. He had understood the author to speak of cauliflower excrescence and cancer as identical; this view was, in his opinion, altogether erroneous. Cauliflower excrescence was essentially a local disease; when once eradicated very seldom, if ever, returned; and was, according to Bennet, merely cancroid in character. The same was true of corroding ulcer. In relation to the views of Mr. Hugier, Dr. B. professed himself thoroughly acquainted. At first, from the great confidence he had in the individual, he was prepared to give them every credence, but a somewhat extended observation subsequently led him to an altogether different conclusion. Though he had never had a service at Bellevue Hospital for the last seven years without one or more cases of procidentia, in not one single instance had there been any considerable hypertrophy present. Dr. Bennet's views regarding the pathology of prolapsus, he had long since held to be without foundation, for he had frequently seen complete procidentia where, instead of hypertrophy being present, the organ was so much atrophied that it measured but two and a half or three inches. There were some cases of hypertrophy of the intra-vaginal portion of the neck, which he believed to be congenital. He had repeatedly seen cases where there was no procidentia, where a portion of the neck was projecting through the vagina.

In reference to the causes for performing the operation, he would name an additional one to those made by Dr. Gardner. This was fibrous tumor of the cervix. He had performed the operation twice for that disease. He had performed the operation eight times. Three of the cases were for cauliflower excrescence; one for corroding ulcer of the cervix; two for fibrous tumors of the cervix, and the remaining two were for congenital elongation of the neck. Of these eight cases, seven recovered without any serious effect following the operation, and one of them died in the course of forty-eight hours afterwards. The fatal case was one of cauliflower excrescence, about three inches in diameter. The disease had not extended to the vaginal portion of the neck, and therefore the case was regarded as one which offered every chance for a perfect cure. The patient was a very poor woman, the mother of three children, who first presented herself at the clinic of the New York Medical College. Board was procured for her with suitable attendants, and the operation was performed in due time, with the assistance of Dr. C. A. Budd. The hour of the operation was two P.M., and the patient was previously enjoined to make her breakfast very light, and eat no dinner, in order that no vomiting should occur after anæsthesia. This request she was unable to follow, and the consequence was that half an hour after the operation, she was attacked with vomiting. Previous to the attack of vomiting, the pulse was eighty-four, and the patient did not seem to suffer from any of the effects of shock; but subsequently she was attacked with peritonitis, of which she died. One of the cases, which was also one of cauliflower excrescence, died six months after the operation, from reappearance of the disease. The third case of cauliflower excrescence was operated upon in the winter of 1857, and is now in the enjoyment of perfect health. He had never seen any danger from hæmorrhage in his cases. He always provided himself with jeweller's cotton batting, to pack the vagina with. This material, before the discovery of the uses of the liquid persulphate of iron, was always moistened with the compound tincture of benzoin; making use of these means he had never lost more than an ounce or two of blood.

In performing the operation, Dr. B. always prefers the use of the bistoury to the écraseur. He had seen Simpson on one occasion use scissors, but cicatrization was so long delayed in that instance by the bruising of the tissue, that he resolved never to adopt this method. Inasmuch as the peritoneal attachment of the posterior surface of the uterus was lower than the anterior, he was accustomed to commence the operation at the posterior portion of the cervix, and excise from behind forward. If the anterior portion was excised first, the traction upon the posterior portion would tend to draw it down lower than was necessary or desirable. In reference to the advantage claimed for the écraseur in preventing hæmorrhage, he thought that such danger was more than proportionably decreased by the rapidity of the operation, as performed by the knife, and the almost immediate restoration of the organs to the normal position. Besides this, compression could be made use of without delay in the manner already alluded to. In all his cases, cicatrization took place in a much shorter time than twenty days, and he was surprised at the length of time which the author of the paper spoke of as being requisite. This he supposed was due to the use of the écraseur. In one of the cases where the cervix was removed for fibrous tumor in a patient of Dr. Harris, the healing process was complete in a week.

The question as to sterility was a very important one. He wished, in this connexion, to allude somewhat in detail to one of the cases of congenital malformation of the cervix, for which amputation was performed. The patient had been married seven years, and had suffered occasionally from excessive menorrhagia, from leucorrhœa, and from more or less pain during sexual intercourse. The anterior lip was about two inches in length, and the posterior lip three and a quarter inches long, curled over, and it was so dense in structure that pressure upon it would move the whole body of the organ forward. The cervix was amputated, and she did not menstruate subsequently. When the first menstrual period had passed, occlusion of the cervical canal was suspected, but all fears were dismissed by a speculum examination. At the next period there was evidently some enlargement of the breasts, and there was also morning sickness, which proved that she was pregnant. Since that time she has borne two children. In several of the cases, Dr. B. had found some evidences of a tendency to peritoneal inflammation following the operation. In about half the cases, on the second or third day, there was a good deal of febrile action, tenderness of the abdomen, and more or less peritonitis. Previous to the operation, he is in the habit of evacuating the bowels thoroughly, and the way is then always prepared for the administration of opiates, which latter remedy he has found of special benefit in those cases of febrile excitement referred to.

Dr. Conant thought that the danger of wounding the reflection of peritoneum posteriorly would be obviated, by first making an incision round the cervix at the attachment of the vagina, then pass below the peritoneum and apply the écraseur. A very common cause of procidentia was, in his opinion, often lost sight of, viz. the weight which was exercised upon the organ by impacted fæces. The assertion of Dr. Gardner that the uterus went up like a balloon, was to him more fanciful than real, inasmuch as four inches were excised. In regard to phagedenic ulceration, he had seen a number of cases. In one of these, where he made a post-mortem examination in a case of a patient of Dr. Gardner, the whole uterus was gone. In a second case there was severe uterine hæmorrhage before death, and the

diagnosis of phagedenic ulcer was then made. The patient finally died, when it was found that the disease, without involving either vaginal septum, had extended to the body of the uterus, and destroyed one-third of its substance, presenting the appearance as if it were cut off by a knife. The canal of the uterus was perfect, and there was an infiltration into the substance of the organ, equal only to about one fifteenth of an inch in depth. In another instance, sloughing had already commenced in the cervix, about half of which came away. He had in his possession also a specimen where half the uterus sloughed away.

Dr. Henschell recollected that, in one case of amputation of the cervix, performed by Meyer of Berlin, the patient returned, at the end of fifteen years, with a daughter, which she had given birth to within that time. All Meyer's operations were performed with the scissors.

Dr. Gardner did not wish to be understood as saying that cauliflower excrescence was identical with cancerous degeneration, but only that the former, if left alone, would invariably become malignant, and, in this connexion, he cited the case of a lady upon whom he operated last July for cauliflower excrescence. The diseased deposit was so soft that, instead of using the écraseur, as he attempted, he simply scooped it out with a spoon, to the depth of two and a half inches, and thereby completely arrested a wasting hæmorrhage. The disease first appeared as a hypertrophy, with ulceration of the cervix, which, after being treated for several months, was apparently cured, the ulceration entirely healed, leucorrhœal flow arrested, and the hypertrophy almost disappeared; at the same time a tumor appeared in the breast, with sharp, lancinating pains. Without much local treatment, this suddenly vanished entirely, disease soon recommencing in the os uteri, and rapidly vegetating into cauliflower degeneration. It continued, as cauliflower excrescence, for about two or three months, when it took on a malignant type, and the patient died two months ago. Dr. G. did not wish to be understood as endorsing Dr. Bennet's theory. In regard to the time requisite for cicatrization, he gave the conclusions of Hugier. In his own case, he removed the sutures at the end of the seventh day. Dr. Sims was constantly in the habit of doing the same thing. The ascent of the uterus "like a balloon," remarked upon by Dr. Conant, is as literally true as possible, for the uterus had ascended so high that it was absolutely requisite to draw it down into view with hooks, in order to complete the dressing.

The Academy then adjourned.

Progress of Medical Science.

TRANSLATED FROM THE FRENCH BY DR. P. F. C. DESLANDES.

HYGIENE OF MILITARY HOSPITALS.

The discussion on the hygiene of hospitals, which has, for several months, engaged the attention of the Academy of Medicine of Paris, has elicited some valuable information on the location, construction, and management of military hospitals, ambulances, etc., from Baron Larrey; and on the influence of the air dispensed to the sick and wounded, from M. Michel Lévi.

In his notes on the hygiene of military hospitals, read before the Academy of Medicine of Paris at its sittings on the 11th and 18th of February, 1862, M. Le Baron Larrey, after a review of the different works and essays which have been published on the subject of hygiene of military and civil hospitals, speaks thus in relation to sites for such institutions.

The removal of hospitals from the centres of population preserves each locality from as many beds of infection, and is the first safeguard, though not a sure guarantee, of their sanitary condition; they must be situated away from insalubrious localities, on elevated grounds, in proximity to streams or rivers, and surrounded by trees.

As to the construction, he says that due attention should be paid to the site, the location, the size and height of the buildings, and the distribution of the wards; but, however well constructed a hospital may be, it loses all its advantages from the moment its wards are crowded or even filled with sick. In such case, the larger the building the greater the danger.

The elevation of the building should not exceed two stories, or even one story, whenever the expenses of purchasing the ground and of building would allow it. The temporary hospitals of the army, built of wood, have but one floor, the ground floor; such is the hospital of the Dey at Algiers, which has now for more than thirty years been occupied as a temporary hospital, and the sanitary condition of which is excellent; such is also the camp hospital of Châlons; such are all the campaign ambulances, or field hospitals.

The inconveniences arising from the superposition of several stories were pointed out long ago, by Hunter, Coste, Desgenettes, Pastorel, and Villermé. There is indeed a hurtful reaction of the lower stories on the upper ones. M. Malgaigne has reported a remark of Desgenettes, who attributed to the installation of his sick in a ground floor, a greater proportion of success than one of his colleagues whose patients were lodged in a higher story. The same consideration led me to select, at the Val-de-Grâce, a whole ground floor as the place of my surgical clinic.

If the buildings or pavilions must be separated from each other, they should be still more so from the dependencies of the hospital: pharmacy, kitchen, storehouse, butchery, laundry, wash-house, baths, employés' lodgings, operating-room, dissecting-room, etc., in order, on one side, not to propagate morbid emanations, and, on the other, not to receive from these deleterious miasmata.

Large and shady gardens and covered walks, either cloisters or galleries, secure to the sick, in the majority of our military hospitals, salutary exercise and recreation.

The staircase should always be wide and spacious, well lighted to facilitate access to the wards at all hours, and allow the moving of litters in all directions.

The arrangement of rooms is the essential point of the question of hospital hygiene.

The appropriation of each building to a limited number of rooms, and above all of each room to a limited number of beds, this is a measure which could not be too much impressed upon the superior authorities, for the improvement of defective hospitals, the perfection of those best constructed, and the preservation of all from the dangers of encombrement (crowding), with a guarantee of the reduction of the mortality.

The contents of the rooms may be limited, according to their relative capacity, to ten, fifteen, or twenty beds; they may even be carried to thirty or forty, but should never exceed fifty.

The separation of the rooms from each other by landing-places, vestibules, offices, or rooms for very sick patients, renders the different wards independent of each other, and contributes to the favorable results of salubrity.

The fever patients, those affected with venereal diseases, and the wounded, which form the three great categories in which the sick are divided in military hospitals, without exception, ought, by a general order, to be separated from each other. Minor regulations may provide for isolation of all soldiers affected with eruptive and contagious fevers, as variola.

The inconvenience arising from too large rooms is not due alone to the filling of all the beds in ordinary times, but particularly to adding others in times of epidemics, and thus multiplying the fatal conditions of crowding. The middle beds, whenever they are not necessary, should be left disposable, or be used to change patients affected with dangerous or contagious diseases, or again to isolate them from their neighbors, because there are not always reserved rooms ready for them.

The smaller the rooms are and the fewer the sick in

them, the nearer the patients are brought to the favorable condition of private hygiene, or the more sheltered are they from morbid transmissions. This is a well known fact, on which all hygienists agree.

The number of beds to be placed in a room should be determined by its cubic capacity and not its superficies; this cubic capacity ought to be, at least, thirty metres for each, and more if it can be obtained.

The interval between the beds should be one metre, and that between the rows of beds two or three metres at least.

Let us add that too great a number of patients collected in one room vitiates its atmosphere and disturbs its quiet, particularly at night, when sleep becomes so salutary to restore exhausted strength. Painful impressions of every kind are then multiplied by the moans and cries of some, the bad smell and uncleanness of others, the nervous fits and delirium of many, and lastly, the agony and death of those whose remains are carried out under the eyes of every one, a grievous spectacle which should be spared to all, by dispersing the patients in several rooms instead of crowding them in one.

The successive and regular vacation of the rooms in military hospitals, is an excellent measure which takes place at different times, in different wards, and has the advantage of reducing the number of the sick, and of allowing the thorough cleaning and airing of the rooms by means of exchange of rooms. Too much importance could not be attached to this. The whitewashing of the rooms with lime or chloride of lime is also a valuable means of purifying and disinfecting the rooms, as it implies many other attentions to cleanliness; it should be done every year or every six months.

The daily cleaning and sweeping of the rooms should begin only a short time before the morning visit, with proper precautions not to interrupt abruptly the sleep of the patients, and not to expose them, when the skin is moist, to a sudden cooling, by opening too soon the doors and windows.

The floors should be waxed instead of washed, as washing impregnates them with humidity.

Lastly, every useless object should be removed from the neighborhood of the sick and even of the sick room; no uncleanliness, no remains of dressings, no dirty or stagnant water should be found there.

(To be Continued.)

American Medical Times.

SATURDAY, JULY 12, 1862.

LOCATION AND APPOINTMENTS OF OUR MILITARY HOSPITALS.

The importance of adequate preparations for the care of the sick and wounded of the Army is now beginning to be understood and appreciated. Added to the sickness and disability that had more than decimated the grand armies of the Mississippi and the Potomac, previous to the last great battles, we must now estimate of the latter army from twenty to thirty *per cent.* of its forces, *hors du combat* from wounds, to augment the vast numbers that were in the hospitals. Ten, fifteen, twenty, and even thirty *per cent.*, or possibly a still higher proportion of our brave soldiers, it is confessed will probably be found constantly in the hospitals. This fact appears to be duly appreciated by the Medical Bureau; and from the tone of the Surgeon-General's instructions to Medical Director Letterman, of the Potomac Army, we judge that insufficiency in medical supplies, or any neglect to meet the exigencies of medical and surgical service in the army, is to be regarded as a serious military offence.

From what we have witnessed in the army before Richmond, and from statements that reach us from our best volunteer Surgeons throughout the national forces, we know that there is no lack of the best medical supplies, and of a liberal hand in their distribution; the supply and organization of ambulance alone excepted. But there arises a question which is of vital importance to the army and to the people at this time, viz.—Are the location and administration of the Military Hospitals such as will promote the speedy recovery of the patients, and most certainly restore them to effective service? All questions of humanity and the details of hospital administration are subordinate to, and covered by, the important question here proposed. We infer that this question is to be satisfactorily solved, for there certainly is significance in the repeated visits of Surgeon-General Hammond to the neighborhoods of our northern cities, and the most salubrious water-sides; while trusty members of his staff have been dispatched on similar errands to the health-giving regions of Minnesota and Iowa. The healthiest localities which are directly and easily accessible by water must be selected as the sites for our Military Hospitals. This is dictated alike by hygienic and military considerations.

Though Hospital Hygiene is a science of such simplicity that no physician or military quartermaster should be justified in violating its principles; those principles, nevertheless, are being continually disregarded in almost every place where hospitals are established, be it in military or in civil life. Even at this moment the Trustees of the renowned St. Thomas's Hospital, in London, are endeavoring, against the protests of the Medical profession, to remove that ancient institution to the old play-house, known as the Surrey Gardens—a place most unfit for a hospital. And, to take an illustration of military hospitals among us, we would state that a few days ago we visited a single ward containing upwards of two hundred and fifty beds arranged in four long rows, so great are the width and capacity of the building. Though under the best surgical and sanitary management, that cannot be a good hospital. Sloughs, gangrene, pus, and the typhous diathesis, will inevitably follow the best surgeons who may venture to serve in such a hospital. On similar grounds, we must protest against the transformation of large churches, seminaries, and hotels, into military hospitals, except of the most temporary character to meet sudden exigencies. Pure fresh air supplied in the greatest abundance to every patient, is unquestionably the first desideratum to be attained in the location and site of a hospital, as well as in its construction, arrangement, and daily administration. No site, plan, or building, should be selected for hospital purposes which does not possess this first requisite. Of course, no city or large village can furnish the proper conditions of atmospheric purity. That town-air is not pure enough for the sick in hospitals; and that it is not possible to prevent its being rendered impure by encroachments of the population and nuisances incident thereto—is unhesitatingly asserted by Dr. Sutherland and his associates of the Royal Commission for improving the condition of barracks and hospitals. (See *their Report made to the British Parliament* in 1861.) In that Report it is very concisely and truly stated, that, "in the construction of hospitals, the great points to be secured are—1st.

Purity of the external atmosphere; 2d. Abundance of pure air and sunlight within the building; 3d. Facility of administration and of discipline."

Hospitals and towns are alike localizing causes of endemic and epidemic diseases, and it is manifestly due both to the public and to the patients that such causes of peril be kept at the minimum point of intensity. We say emphatically, let all the military hospitals be located beyond the precincts of cities, and let simple one-story pavilions take the place of every other style of buildings for hospital purposes. By these means will we most certainly secure the three essential conditions of good hygiene and good management as laid down by the British Hospital Commission. And, for the present, let none but simple and inexpensive plans for these hospitals be adopted. The period for establishing grand *hotels des invalides* has not yet arrived. Soldiers of the loyal army beg for the privilege of being returned again to active service in the field in the briefest possible time; and if, hereafter, there should be need for great permanent hospitals for military invalids, our disabled soldiers will require no such fools' palace as the "Netley Hospital," but neat pavilions rather, in the midst of gardens and rural scenes.

The terrible realities of the present war are now so well understood that it will be wise to forecast in the selection of hospital sites, and if practicable, secure such situations as may long be occupied. David's Island, at the foot of Long Island Sound, near our city, has been secured by long lease, with the privilege of purchase; and the temporary pavilions which are to be erected there, may, if properly planned, be the best of hospitals until our nation's conflicts are for ever ended. In hospital construction "what is worth doing at all is worth doing well." Complicated plans should always be avoided, but the essential conditions, viz. air and light, both within and without the wards, and every needed facility of administration, should be provided in every hospital, be it a tent, a pavilion, shanty, or a ceiled edifice. Simplicity and spaciousness of plan most certainly and economically provide for the proper ventilation and lighting of a hospital. Single pavilions, or pavilions in groups, with the parallel buildings separated twice or thrice the added width and height of each, on elevated and thoroughly drained ground, can be erected in any proper locality more expeditiously than churches and old edifices can be fitted and prepared for hospital use: and as to the facilities and economy of administration in such pavilions they are incomparably superior. The Belgian State Hospitals, which in many respects are models, as well as the success of the simple pavilions and shanties that were erected more than ten years ago for the accommodation of the sick at Quarantine, and at the State Emigrants' Hospital on Ward's Island, have fully settled the question of the utility and economy of such structures for hospitals. In his work on Ventilation, Dr. Reid mentions that he found at the old extensive Quarantine hospitals on Staten Island, that the physician-in-chief, Dr. Harris, had vacated the massive and costly brick edifices, in favor of the shanties, on account of the more favorable hygienic conditions and greatly reduced death-rate in the latter buildings. And we know that the percentage of mortality in the vast hospital establishment on Ward's Island the past ten years has been unprecedented. For further testimony upon this and kindred subjects we are happy to refer to the statements of the younger Larrey in preceding columns.

As simple pavilions on fresh grounds and beyond the limits of large towns are so manifestly preferable for Military Hospitals, the question has arisen when we have seen the wounded and sick carted long distances by thousands over rough pavements in Washington, Alexandria, Baltimore, Philadelphia, and New York, why are military patients subjected to the perils of city hospitals, and to the inconvenience and anguish of such transportation, when the verdant and well drained slopes of our rural watersides, along our bays and rivers, so temptingly offer salubrious hospital sites, the most accessible and perfectly appointed by nature? Upon the health-giving banks of the many bays and rivers, from Cape May to head of tide-water on the Hudson and the Connecticut, there are hundreds of localities that are infinitely better adapted to sites than any that can be selected in populous towns, and yet sufficiently accessible to our cities. Upon the upper Mississippi such localities also abound; and the brave soldiers of the southwest, who are becoming disabled by sickness, will soon fight again after being allowed to breathe the bracing air of Minnesota.

A word to our brethren in the field respecting certain essential appointments of a good hospital. Erect your pavilions of any length you please, but never attempt to place more than two hundred patients under one roof or upon a single acre of ground. Always provide for the subdivision of long wards by means of portable screens of venetian work, so that the number of patients in the same compartment in view of each other shall not exceed twenty or thirty; and always provide a separate compartment or room for the dying and for the dead, whose final removal should be unseen and unheard by the living. Depend upon window ventilation, which can only be properly insured when the ward is less than thirty feet in width and furnished with opposite windows; but when practicable have special supply and exit shafts from the roof. Have open fireplaces. Have at least eighty feet of floor area, and not less than one thousand cubic feet of aerial space for each patient. Have good water and an abundance of it, good sewerage, latrines, etc.; and not least, have good nurses and cooks, and competent women to preside over cooking, feeding, and cleanliness.

At the present hour, in the great crisis of the nation, human life is at its highest value, and to reduce the percentage of mortality in the Military Hospitals is to confer inestimable benefit upon mankind. Though the low death rate in our military hospitals is yet unparalleled, *it may and it should be reduced forty per cent.*

THE WEEK.

A physiological view of political events, and of public men and public measures, might occasionally throw much light upon the most vexed questions of the day. In accordance with the law that every event has an adequate cause, the thrilling incidents of the War of the Rebellion will be found to have instructive physiological relations. Without that imperturbable self-possession and deliberative judgment which wonderfully characterize the unconquerable Chieftain of the Army of the Potomac, that army would never have reached its new base of operations on the James river, in the face of overwhelming forces of the enemy. And now the question arises—May there not be a physiological abnormity in some of the Councillors of State, at Washington, which diminishes the proper effec-

tiveness of our powerful forces in the field? The *Herald* justly says, that "the National Cabinet is a conclave of lawyers." It certainly would be prudent to have at least a physiological adviser in or for the Cabinet. Physiological abnormity unsuspected in a Minister of State, may precipitate needless calamities upon millions of citizens. But the *mens sana in corpore sano* is almost indispensable to a wise administration of national affairs. Truly has it been stated respecting the great concerns of state in Great Britain, that politics only half explain the British Premier. "Lord Palmerston's influence is in a great measure *physiological*—an influence on the temper of the country produced by his own temper, and health, and good spirits." We know that PRESIDENT LINCOLN is a wonderful example of sound physiological health. Happy will it be for our country and the army if his Ministers of War, of State, and of Finance are in an equally normal physiological condition. We thank God for the sound health of our best Generals.

—

AT Savage's Station, near where the railroad crosses the Chickahominy, it is reported that many thousand wounded men had been gathered on Saturday succeeding the terrible battle at Gaines' Hill. Quickly the army was put in motion at night towards the James river. The ambulances were insufficient for the transportation of all the wounded who had escaped from the field of carnage where thousands still remained, and at once a large number of the surgeons volunteered to remain at the Station, and, under the direction of DR. SWINBURNE, give themselves to the duty of attending the wounded who must be left on the field and with the enemy. With pride we record the names of the surgeons thus remaining at Savage's Station: "There being no means of transporting them, two thousand five hundred sick and wounded soldiers were left behind at Savage's Station. The following surgeons remained with them, and will give them all attention, namely:—Dr. Swinburne, of Albany, in charge; Drs. Voorhees, of New Jersey; J. M. FOX, Underwood, Newell, Dowling, White, O. Munson, W. A. Smith, and Nordman, of Philadelphia; Thompson, of Maine; Hogan, Middleton, Page, and Potter, of the Seventh Maine. Besides these surgeons, fifty nurses were also detailed and left."—*Herald Corres.*

—

THE enormous amount of killed and wounded in the terrible week of battles in the Army before Richmond fearfully demonstrates the fatality of the modern implements and projectiles of warfare. Until we can know more definitely the actual fate of *twenty thousand* of our brave soldiers, and can also know the actual numbers of the enemy's forces, we are forced to the horrifying conclusion that full *forty per cent.* of all who engaged in the first two days' conflict on either side, are to be numbered among the killed and wounded; and that after the loyal forces gained a more advantageous position, the massed legions of the rebels were mowed down at the rate of sixty *per cent.* of their entire strength. Never, since the days of Austerlitz and Waterloo, has surgery found such a bloody field.

—

ENDURANCE of physical effort is a well proved quality of our northern soldiers. After a week of successive and terrible battles, and a continuous movement of the Federal forces around to a new base of operations, the massed columns of the enemy were in their final onsets nearly annihilated by the steady and augmented energy of loyal arms, and finally, upon the concluding repulse of the enemy, went up a cheer that told what unconquerable strength was remaining. With wonderful propriety and justice did the Commanding General open his stirring address, saying: "Soldiers of the Army of the Potomac! your achievements of the last ten days have illustrated the *valor* and *endurance* of the American soldier."

—

SURGEON-GENERAL HAMMOND has spent the past week in visiting the Medical Corps and the Hospitals of the Army on the Peninsula. The magnitude of his official responsibilities and of his power for good to the loyal forces and his country's cause, could nowhere else be so impressed upon his mind. To be in the medical service of the army is now a patriot's privilege, and we predict that it will soon become a higher honor than ever before to be a member of the Medical Staff of the American Army.

Correspondence.

FOREIGN CORRESPONDENCE.

LONDON, June 7, 1862.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—Among the multitude of interesting objects which are presenting themselves daily to my notice, and of which I should like to say something, I must select but a few, and those possessing the greatest novelty. Of this class, I may certainly include one instrument to which my attention has been called to-day, which is known by the name of *Spectroscope*. It is an improvement in Spectrum cameras, consisting in an entirely novel arrangement of the parts, so as to produce, in fact, a new instrument; I need not describe its peculiar construction at length, because it would not be intelligible to the reader without illustrative plates; I may, however, remark, that it consists essentially in a prism or in prisms, held in a box or chamber, supported on a pedestal or stand; and to the front of this chamber is secured a tube, which is provided with a collimating lens or lenses at the end nearest the chamber, and at the furthest extremity is furnished with an arrangement by which a horizontal slit can be adjusted in width by means of a fine screw. The back of the box carries a small telescope, which has an adjustable eye-piece. The spectra of the various metals, etc., are obtained by the aid of a spirit lamp and blowpipe, or a gas burner, or what is better still a gas blowpipe. A portion of the matter or salt to be examined, either in the solid state or in solution, is placed on a small loop of platinum wire, which is fixed on a steady support, and the loop introduced into the blowpipe flame. If the telescope be now adjusted, the spectra present a most beautiful appearance, differing according to the substance undergoing analysis, soda giving its characteristic *yellow line;* lithia *crimson*, etc. etc. None of the bright lines produced by any one metal interfere in the least with those produced by any other; *so that in a mixture of several metallic salts, each ingredient can thus be easily detected.* Even the most minute trace of any body may be recognised if mixed with the largest quantity of any other substance. The delicacy of this mode of testing is such, that $\frac{1}{100,000,000}$ part of a grain of soda can be easily detected. *Three new elements have already been discovered by this new mode of analysis.* Its great value in the detection of poisons is too obvious to need remark.

The price of the instrument is from twenty-five to fifty dollars, according to the size and power. It goes under the name of "*Cooke's Spectroscope.*"

At a Soirée of the "Royal College of Physicians" recently given to members of the Social Science Association, now in session, I saw some beautiful experiments with

this instrument, which fully sustain all I have stated in regard to it. The exhibitions of the *laryngoscope*, also, by Prof. Czermak, showing the vocal cords, and whole inner surface of the larynx on himself, were very gratifying and satisfactory. I believe I remarked in a former letter, that *Rhinoscopy*, so called, has already furnished trustworthy contributions to the knowledge of the morbid anatomy of the larynx; and, in the hands of the inventor, been successfully applied in the treatment and cure of laryngeal affections, particularly of polypi; yet that it can hardly be expected to come into general use in the management of this class of diseases. There was an ingenious apparatus, also, exhibited for showing vibrations in mercury by electrolysis; specimens of microscopic writing somewhat bordering on the marvellous. For example, the Lord's Prayer was written by Mr. Peters's machine in a circle, *the three-hundredth of an inch in diameter;* a square inch would contain 90,000 such rings, the area of each being about the hundred and fifteen thousandth of an inch, and, in writing of this size, the whole Bible and Testament might be written *seven times in a square inch*. The large binocular microscopes of Powell & Lealand, which were exhibited, have been brought to great perfection; though I saw no mention made of the fact, that this is an American Invention. This arrangement adds about forty dollars to the cost of their largest achromatic microscopes. Specimens of submarine cables; of a substitute for India-rubber; of Wheatstone's Automatic Telegraph; splendid crystals of acetate of rosaniline; illustrations of polarized light; the numerous powerful microscopes and objects; glyceric films, illuminated with electric light; the spectrum of gases; the experiments to prove the evolution of heat on the freezing of water. These, and various other objects of scientific interest, contributed to the intellectual gratification of the members and their guests.

June 10.—On Friday last, "*The National Association for the Promotion of Social Science*," commenced its annual meeting in this city. This association, under the Presidency of Lord Brougham, has been in existence but a few years, but has already accomplished great good. Holding its annual meetings in the leading towns of the empire, and attended by the more intelligent and active of every class, it has widely spread a belief in the truths of social science, and stimulated inquiry into the facts on which these are founded. The society embraces in its curriculum of Social Science, Jurisprudence, Education, Crime and Reformation, Public Health, Social Economy, and Trade and International Law. Daily and evening sessions are held, at which papers are read and discussions maintained, in which any member can participate; these, with numerous soirées, visits to educational, reformatory, and industrial institutions, excursions by rail and steamboat, etc., are among the attractions held out to its resident and foreign members. I suppose that none of its departments has accomplished as much good as that of "*Public Health*." I am informed that in every town which the association has visited, the meetings have had the effect of directing attention to the proper construction of houses; the state of the drainage; the supply of good water, and other matters of sanitary importance; and that, in every instance, active exertions have followed for the improvement of the civic health. It has everywhere found public opinion on the subject, apathetic; and everywhere has left it more active. The advocates of sanitary reform have been encouraged and stimulated in their laudable efforts; and municipal authorities have everywhere shown a willingness to profit from the facts set before them. Indeed, one of the most promising features of this department is the attempt it makes, and not unsuccessfully, to spread among the whole community a knowledge of the laws of life, and of the means for preventing disease. The British "Public Health Act" was owing to the influence of this society; also, the act for repressing the adulteration of food, as well as the system of registration of births, deaths, etc. The practice and results of quarantine were also investigated by this association in 1859, and the report of their committee on the subject was printed by the House of Commons. It has published much valuable information and evidence relating to the proper construction of hospitals, and the best plan of obtaining hospital statistics. These latter papers have been sent to every hospital in the kingdom, and much good has resulted in consequence. A "Ladies' Sanitary Society," affiliated to the institution, has also been formed, and rendered the most important services by its practical exertions in the cause—by circulating cheap but admirably written pamphlets, explaining the laws of health, and the consequences of their infraction, by procuring the delivery of popular lectures on the same subject by medical officers of health and other scientific men to numbers of the working classes; and by oral instruction by visitors to the poor under the supervision of the society. By these and other measures within the sphere of their operations, they are doing perhaps more to increase the sum of health in the community than any legislative or official interference could effect. For we must ever remember that an improvement which is effected for the health of the people from without is apt to be temporary in its nature, because it is accepted by them without any real faith in its efficacy; but one which results from a change in their own character and habits, founded on conviction of its necessity, and a reasoning appreciation of the good gained by the change, is placed beyond the accidents of legislative and official support, and is certain to endure. I send you some tables which I have been allowed to copy from papers presented to the "Health Department," whose meetings I have attended with much profit and gratification as a foreign member, which you are at liberty to publish if you find them suited to your pages. CHARLES A. LEE, M.D.

DIET OF LONDON HOSPITALS.

Daily Allowances in London Hospitals.
Furnished by DR. LEE.

FULL DIET.

Hospitals.	Bread.	Cooked Meat.	Potatoes.	Butter.	Porter or Beer.	Tea.	Number on Diet.
	oz.	oz.	oz.	oz.	Pints.	Pints.	Per cent.
Guy's Hospital	14	6	8	1	1		37·7
St. Bartholomew's	14	8	8	1	2	2	67·8
St. Thomas's	12	4	8		1	2	36
The London	12	6	8		1		42·1
St. George's	12	6	8	1	2	2	·9
King's College	12	5	8				18·6
Middlesex							

MIDDLE OR ORDINARY DIET.

Hospitals.	Bread.	Cooked Meat.	Potatoes.	Butter.	Porter or Beer.	Tea.	Number on Diet.
	oz.	oz.	oz.	oz.	Pints.	Pints.	Per cent.
Guy's Hospital	12	4	8	1	½		41
St. Bartholomew's	12	4	8	½	1	2	15
St. Thomas's	12	4		¼		1	37
The London	12	4	8		½		23
St. George's	12	3	8	1	1	2	63
King's College	10	3	8				
Middlesex	12	4	8				48

RATIONS.

1862.	Bread.	Cooked Meat.	Vegetables.	Meat.	Sugar.	Milk.	Cheese.
	oz.	oz.	oz.	oz.	oz.		oz.
British Soldier, Home Service	24	8	16	1	1½	3	
Seaman, Royal Navy	20	12	8	2	2		
Convict, Chatham	27	6	19	1¾	¾	2	2
Lunatic, Hanwell	12	4¼	12			2	2
Pauper, St. Olave's	14	5	8	2	2	2	

HEALTH OF ARMY OF GREAT BRITAIN.—1859.

By Dr. Milroy.

Station.	Daily Sick Rate.	Annual Sick Entry Rate.	Annual Death Rate.	Annual Invalid Rate.
United Kingdom	50 per 1000	10·31 per 1000	8·4 per 1000	13 per 1000
Mediterranean....	48 "	10·14 "	13 "	8·1 "
West Indies....	53·5 "	12·30 "	17 "	4·9 "
Australian Colonies	27 "	57·1 "	10 "	9·8 "
Ceylon and China	99·5 "	22·38 "	47·1 "	27·5 "

BRITISH NAVY.—1858.

Station.	Daily Sick Rate.	Annual Sick Entry Rate.	Annual Death Rate.	Annual Invalid Rate.
Home	53·5 per 1000	12·47 per 1000	9·6 per 1000	23·9 per 1000
Mediterranean...	48·7 "	13·69 "	11·1 "	27·3 "
West Indies.....	64·6 "	19·62 "	20·8 "	31·2 "
Australian	42 "	13·68 "	7·9 "	23·7 "
East India and China.....	92 "	26·54 "	62·5 "	80·9 "

MEAN OF 1856-7-8.

Station.	Daily Sick Rate.	Annual Sick Entry Rate.	Annual Death Rate.	Annual Invalid Rate.
Home	50 per 1000	11·40 per 1000	10·3 per 1000	23 per 1000
Mediterranean...	52 "	13·55 "	10·6 "	24 "
West Indies.....	58 "	17·34 "	24 "	25 "
Australian	56 "	13·99 "	9·9 "	39 "
East India and China.....	93 "	23·57 "	47·6 "	52 "

AMPUTATIONS FOR DISEASE.

Furnished by Prof. C. A. Lee.

	Guy's Hos., 1854 to 1860.			St. George's Hos., 1852 to 1859.			Paris Hos., 1836 to 1841. (Malgaigne.)					
	Cured	Deaths	Deaths per cent.	Cured	Deaths	Deaths per cent.	Cured	Deaths	Deaths per cent.	Cured	Deaths	Deaths per cent.
Thigh....	66	14	17·5	38	13	25·6	61	92	60	345	223	41
Leg	23	7	23·3	18	9	33	58	55	42			
Arm.....	8			8	2	20	37	24	39·3			
Forearm..	11	1	8·3	6			12	5	29.4			

MORTALITY, ETC., OF LONDON HOSPITALS.

Furnished by Dr. Lee.

Hospitals.	Daily Average of Patients.	Average Residence Days.	Deaths per cent.	Medical.	Surgical.
St. Bartholomew's.	555	36	28 Medical.	10·72	18·7	5·6
			44 Surgical.			
Guy's.....	507	34·6	35 Medical.	9·4	14·1	5·6
			31·35 Surgical.			
St. Thomas's.....	460	38·7	33·12 Medical.	9·76	11·37	5·49
			50 Surgical.			
King's.....	120	33	31 Medical.	10·73	14·50	7·97
			35 Surgical.			
University.....				11·19	14·49	8·18
St. Mary's.....	142	30·65	265	10·11	11·53	8·52
			332			
Westminster.....	134	32·1		9·6		
London	325	29	30	8·4	12·8	6·48
			38			
Charing Cross.....				8·3	11·7	5·3
Middlesex.....						
St. George's.....	322	267		8·34	10·9	5·6
	123					
	199					

MORTALITY OF PARISIAN HOSPITALS.

By A. E. Dunham. (From Dr. Lee.)

Hospitals.	Daily Average of Patients.	Deaths per cent.	Medical.	Surgical.	Average Residents. Medical.	Average Residents. Surgical.
Larriboisiere	641	15·32	17·3	8·00	24·59	27·57
Necker.....	349	15·70	11·1	5·4	17·80	28·30
Beaujon	401	17·14			21·32	31·32
Pitie.....	599	17·56			21·31	32·23
Hotel Dieu.....	785	21·64			23·16	26·36
Cliniques.....	125	27·37			14·82	29·39
Charité.....	481	35·27			23·73	23·60
Hotel des Enfans Mdes.	573	18·6	21·9	7·75	79·79	44

Army Medical Intelligence.

MEDICAL AFFAIRS AT FORTRESS MONROE.

[Army Correspondence of the American Medical Times.]

The Department of Eastern Virginia is not less the seat of medical than of military interest. Its hospitals are filled to overflowing with the sick and wounded from the battle-fields about Richmond. This immense influx brings the utmost pressure upon the medical officers who administer the affairs of the Department. The Medical Director, Dr. John M. Cuyler, U.S.A., upon whose broad and well-worn shoulders falls the burden of this unparalleled responsibility of providing for the cargoes of sick daily arriving, proves himself equal to the task. Ever engaged, yet attentive to the wants of the humblest, constantly harassed with the endless details of business, yet always affable and courteous, Dr. Cuyler seems peculiarly well adapted to the position he now occupies. But his friends (and who that has come within the circle of his acquaintance is not his friend?) will rejoice to learn that Government has called him to another and still more important sphere of duty. He is the senior officer of the Corps of Medical Inspection, recently appointed by the President, and attached to the Medical Bureau. It is to be regretted that the same discretion has not been exercised in the selection of the entire corps. The Medical Purveyor, Dr. R. H. Gilbert, is an efficient officer, and gives order and system to the dispatch of business. He has lately improved the *armamentarium* of the military surgeon. His general operating case has not received the attention it deserves. It is compact and yet complete to an extent surpassing any case I have ever examined. I regret that Dr. Smith has not illustrated it in his *Hand-Book of Surgical Operations.*

The hospitals in this vicinity are the Mill Creek Hospital in charge of Brigade-Surgeon John W. Hunt; the Chesapeake Hospital, in charge of Brigade-Surgeon R. B. McKay; and the Hygiea (now merely used as a depôt for the receipt and transfer of the wounded) in charge of Brigade-Surgeon Bontecou.

The Mill Creek hospital consists of a number of buildings so arranged as to carry out the idea, to some extent, of the Pavilion hospital. The main building is 250 feet in length by 50 feet in width, a rude board structure, the entire area being a single ward, accommodating 200 patients. The ventilation is very perfect, and notwithstanding this hospital is filled to its utmost capacity with the severely wounded, the atmosphere is not perceptibly tainted. Three other buildings have been erected adjacent to this hospital on a similar plan, and several others will be constructed. As yet, erysipelas has scarcely appeared in this hospital, and pyæmia is not very frequent. Great credit is due to Dr. Hunt for the efficient management of this institution; with rare administrative ability he combines the sound judgment of a discreet and experienced surgeon; the knife is never used as an experiment, and rarely as a *last resort*—the common plea of the mere operator. The following gentlemen compose the surgical staff of the hospital: Drs. Orsamus Smith, T. B. Crooker, J. H. Reynolds, T. E. Waller, L. Beers, C. McCormick, L. S. Bowles; Medical Cadets, E. E. Luster and O. M. Pray.

The Chesapeake Hospital is the old seminary of that name, standing on the shore of the James river, about two miles from the fort. It is a large, fine building. The ventilation is very imperfect, as the rooms are small, but this defect is remedied by the location, which is close to the river, and by the freedom from surrounding buildings, or forests. Erysipelas does not appear here, and pyæmia is seldom met with. Dr. McKay is a very capable officer, and manages the details of this hospital with great success. Like Dr. Hunt he is conservative in the practice of surgery, and not a few patients may thank him for taking their discharge from this hospital in the erect, rather than the recumbent posture.

Surgeon-General Hammond, accompanied by Surgeons Clymer, Brinton, Le Conte, and Hartshorne, arrived here this morning *en route* for the Army of the Potomac. The Surgeon-General shows himself every way worthy of his high position; instead of snoozing away his life in his official chair at Washington, and leaving the administration of the details of his department to inefficient subordinates, as has been too much the custom with his predecessors, he is personally present wherever great despatch is required. We hear of him visiting the hospitals at New York, Philadelphia, New Haven, Baltimore, or with the Army of the Potomac, at this critical period; and almost at the same time we learn that he is presiding over the Army Examining Board at Washington, and holding himself personally responsible for the character of the newly appointed assistant-surgeons. This is the kind of Head that the Medical Bureau has long needed; more important reforms have been effected, which will give efficiency to the staff, during the short administration of the present Surgeon-General, than have been made in the last twenty years. We may well congratulate the profession on the honor which the appointment of Dr. Hammond confers upon it; and the country, that the immense resources of the medical department will be wisely and timely directed towards the relief of her suffering sons.

The U. S. Sanitary Commission Hospital Ship St. Mark is here in charge of Dr. Draper, of New York, and the Euterpe is daily expected. There is much need of these hospital accommodations, and the Sanitary Commission deserve great praise for their timely aid.

Medical News.

New Hampshire State Medical Society.—The seventy-second anniversary meeting of the New Hampshire Medical Society was held at Concord, Tuesday and Wednesday, June 3d and 4th—the President of the Society, Dr. E. K. Webster, of Boscawen, in the chair, and Dr. C. F. P. Hildreth, of Concord, Secretary *pro tem.* The following gentlemen were elected members:—Charles F. P. Hildreth, M.D., Concord; Passmore Treadwell, M.D., Concord; George Montgomery, M.D., Gilmanton; George E. Spencer, M.D., Franklin; Hubert Sleeper, M.D., Grantham; Hadley B. Fowler, M.D., Bristol; Jefferson Smith, M.D., Dover; Frank P. Foster, M.D., Concord. At 12 o'clock, the Society listened to the annual address by the retiring President, Dr. Webster—Subject: "The relations of the profession to the country and the war."

The following gentlemen were chosen officers of the Society for the ensuing year:—*President*, Dr. Charles P. Gage, of Concord; *Vice-President*, Dr. P. A. Stackpole, of Dover; *Secretary*, Dr. Nathan Call, of Boscawon; *Treasurer*, Dr. Levi G. Hill, of Dover; *Councillors*, Drs. A. H. Robinson, S. Campbell, Thos. Sanborn, C. H. Shackford, J. C. Hanson, W. H. Thayer, S. Cummings, A. F. Carr, L. F. Lock, J. F. Hall, I. W. Lougee, G. A. Phelps, Chas. Palmer, and J. H. Crombie. *Orators*, Drs. L. W. Peabody and N. Tolles. *Delegates to Dartmore College*, Drs. W. D. Buck and L. G. Hill. *Committee on Surgery*, Dr. W. H. H. Mason; *do. on Medicine*, Dr. S. M. Whipple; *do. on Epidemics*, Dr. W. H. Thayer; *do. on Publication*, Drs. Call and Hildreth. *Committee of Arrangements*, Drs. Gage, Hill, Stackpole, and Smith. The following gentlemen were chosen delegates to the State Medical Societies of New England:—Drs. Albert Smith and A. H. Robinson to Massachusetts; Drs. F. P. Fitch and S. Bunton to Rhode Island; Drs. George B. Twitchell and S. M. Whipple to Vermont; Drs. Noah Martin and P. A. Stackpole to Maine; Drs. J. F. Whittemore and C. F. P. Hildreth to Connecticut.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE

NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL IN THE PRELIMINARY COURSE.

SESSION 1860-61.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

LECTURE X.—PART II.

Amount of Water in Rhachitical Bones.—Elimination of Phosphates and Lactic Acid.—Increased Elimination or Decreased Assimilation.—Absence of Proteinous Substances and Rhachitis.—Loss of Phosphates and Rhachitis not identical.—Chemistry of Rhachitical Bones and of those only deprived of Phosphates.—Slow Dentition the Cause of Rhachitis, or Rhachitis the Cause of Slow Dentition?

THE anatomical structure of both the normally growing and the rhachitical bone is the same; further, the amount of carbonic acid is increased in both the new deposits of the growing and in the rhachitical bone. Thus the direct connexion between, or dependency on each other, of the normal development and the rhachitical deformity of the osseous tissue is evident.

The principal deviation of the chemical constituents consists in the increased amount of water. Friedleben found in the healthy parietal bone of a child of six months 21·058 per cent. of water; in the rhachitical parietal bone at the same age, from 48·383 to 53·574 per cent.; and in that of a rhachitical child of eight months, as much as 81·533 per cent. The occipital bone of a child of a year and two months, with normal skeleton, yielded 41·931 per cent. of water, while the parietal bone of a rhachitical child of the same age yielded 66·314 per cent. in the recent deposits, the old subjacent lamina vitrea yielding but 34·221 per cent. The same author found in the normal diaphysis of the tibia of a healthy child of six months, 21·323 per cent. of water; of a rhachitical one, at eight months, 44·790; in the spongeous part of the former, 64·037; of the latter, 76·912. The same bones of children of a year and two months, one healthy, the other rhachitical, yielded a similar proportion, viz. 4[illegible] and 72 per cent. The normal ribs of a child of six months contained 44·305 per cent. of water, the rhachitical, 54·809. In other children this percentage would increase to 59·64, and even to 66·105.

The increased amount of water contained in the rhachitical bone forms a sort of serous mollification, which in itself may be sufficient to prevent the cartilage and newly formed bone from assimilating as many phosphates as under normal circumstances. For it appears, doubtless, that with so considerable an amount of water contained in the osseous and cartilaginous tissues their chemical affinity generally should be changed. At all events an older explanation of the rhachitical bone being deprived of a part of its phosphates is very improbable. Many authors have expressed this opinion, that the phosphates were kept dissolved in the blood by a super-abundance of lactic acid, and were, in company with the latter, eliminated through the kidneys and bladder. A part of the chemical investigations which have been made for the purpose of elucidating this matter, have appeared to be favorable to this opinion, as not only lactic acid, but also a large amount of phosphate of lime, has been found in the urine of many rhachitical children. But in order to explain the want of phosphates in rhachitical bone, in this manner, the presence of phosphates and the occurrence of lactic acid in the urine of rhachitical children ought to be constant; which is by no means so in all cases. Rhachitis will very often develop without the prevalence of disorders of digestion and a surplus of lactic acid, and surely, the swelling of the epiphysis and periosteum, which are just as essential for the diagnosis of rhachitis, cannot be explained by the premature elimination of phosphate of lime. Virchow, moreover, has long ago expressed this opinion, that probably the diminished import of phosphate was of more importance in the rhachitical process than the augmented export. At the same time he directs the attention to the repeated eulogies of the administration of carbonate and phosphate of lime, in rhachitis. He also reminds us of the fact, that the larger part of phosphates are introduced into the system in combination with proteinous substances, and the digestion and assimilation of these latter are greatly interfered with in those gastric disorders, which frequently precede fully developed rhachitis. But again, he asks, why it is that gastric disorders are not always the initiatory step of rhachitis; that further, the bones should suffer in preference; and finally, that, in spite of diminished import, the epiphyses and periosteum should be tumefied. Therefore, we need not wonder that other authors, for instance Niemeyer, consider as the fundamental cause of rhachitis, a nutritive disorder in the epiphyses and periosteum kindred to inflammation. This author points to the fact, that in other tissue, as skin and mucous membrane, we frequently meet with diffuse affections of exanthematous or catarrhal nature, the causes of which are totally unknown to us, but which, though not constantly, are principally found in cachectic, badly nourished, and rhachitical children. And that, after tumefactions have once commenced, the impeded circulation should prevent the phosphates from being deposited to a sufficient amount, and favor their immediate elimination through the kidneys; that therefore the usual superabundance of phosphates in the urine of rhachitical children must be taken as consequence rather than as cause of the want of phosphates in the diseased tissue, is but natural; especially after those remarks I have made before, on the influence of the increased amount of water in the osseous and cartilaginous tissue.

To what extent Virchow is right in directing our attention to the connexion between rhachitis, which is very common among the poorer class of society, and the absence of proteinous substances from the food, either breast-milk or artificial, is shown by everybody's and everyday's experience. Böcker found in the milk of a mother, who nursed a rhachitical child until it died at the age of fifty-three days, in 1000 parts, but 13·111 of caseine, 23·31 of butter, 60·358 of sugar, and only traces of phosphates to the amount of 0·089. Friedleben has, in his "Contributions to the knowledge of the physical and chemical contributions of growing and rachitical bones, in early infancy," the following remarks:—I examined the milk of two women, whose children were brought up with breast-milk exclusively. The skeletons of both were rhachitical in their totality; both recovered, but only after their diet had been changed. One was a turgid, pale woman, of forty-six years, who had been bled several times during her pregnancy. Two specimens of her milk were examined, the first in the fifth, the other in the sixth month after the birth of her child. The analysis yielded, in 100 parts, in

No. 1.	No. 2.
Water, 87·829.	Water, 87·330.
Butter, 4·390.	Butter, 4·390.
Caseine and sugar, 7·542.	Caseine and sugar, 7·542.
Inorganic matter, 0·239.	Phosphate of lime, 0·069.
	Alkaline salts, 0·169.

The milk of the other woman, four months and a half after the birth of her child, looked thin and serous like that above. Since her confinement, being at work and without medical attendance, she had been suffering from uterine hæmorrhages. She was tall and slender, and nearly forty years old. The analysis of her milk resulted in the following figures. In 100 parts of milk there were,

Water,	91·307.
Caseine, butter, sugar,	8·509.
Phosphate of lime,	0·099.
Carbonate of lime,	0·010.
Alkalies,	0·073.
Oxide of iron and silicium,	0·002.

The normal proportions in the healthy milk, not to speak of constitutional and other oscillations, differ considerably from the above, as is proved by the following figures of the several percentages of normal milk:—

Water,	86·60.
Caseine,	3·50.
Sugar,	6.20.
Butter,	3·50.
Soluble Salts,	0·06.
Insoluble Salts,	0·14.

From these statements it follows, that the milk of both women was below the average rate of proteine and hydrates of carbon. The earthy salts were also diminished, but they were fewer in the first case than in the second, while the rhachitis of the second was more decidedly developed than that of the first. Nothing else is required to prove, that the diminished import of phosphates is neither the only nor the principal cause of rhachitis.

At all events then, this much is understood now, that there are other important elements in what we have been used to call rhachitis besides the diminished amount of phosphates; and that want of phosphates, and rhachitis, are by no means identical. Nor is the very nature of rhachitis explained by, or comprehended in, the process of resorption. This is best shown by those physiological experiments which allow a free absorption, but less access of earthy salts and phosphoric acid. Chossat has made the first series of such experiments. Friedleben made similar ones, allowing a number of pigeons no other food but vetches and distilled water. Through five or six months they appeared to be well; then diarrhœa would set in, emaciation take place, and death from exhaustion ensue in the tenth month. The chemical analysis of their bones, compared with those of healthy pigeons, resulted in the following figures:—

Pigeon.	Bone.	Anorganic matter.	Organic matter.	Fat.	Carbonic Acid.	Spec. gravity when dried at 80°.	Spec. gravity when dried in open air.
Healthy	diaph. humer.	64·603	35·397	7·110	8·571	2·692	1·822
Diseased	diaph. ulnæ, et radii.	37·712	62·288	12·084	6·842	2·038	1·762

A further difference was this, that jelly could be formed of the bones of the healthy pigeon in eleven, of the diseased in five minutes. Thus, as gluten was the organic basis in either, the chemical constitution of the diseased bones, as far as organic matter was concerned, was not at all altered. But there were a number of other differences between this diseased bone, and the rhachitical tissue. The amount of earthy salts decreased to nearly one-half of the normal percentage; fat increased; specific gravity less. Carbonic acid twenty-five per cent. less than in the bones of the healthy bird. No tumefaction of epiphyses or periosteum. These results depend on diminished assimilation, which, moreover, is distinctly proved by anatomical examination of the diseased bones. They are thin, fragile, not flexible; they are anæmic, and their medullary canals very wide indeed; the surface is uneven; there are intervals, interruptions, between the remnants of the bone and the dispersed osseous corpuscles, which are much less numerous and less regular than normal, to such a degree that Haversian canals between them are not recognisable. There was nowhere a trace of recent formation, only the proofs of normal absorption.

Now, after having sifted to some extent whatever is known to this very moment on the anatomical and chemical nature of rhachitis, the most recent results included, and alluded to the usual alleged causes of this disease, I need hardly return to my former assertion, that dentition as such, and rhachitis, are in no causal relation to each other; at all events there is no such connexion between the two that the process of the protrusion of teeth could produce rhachitis. Not to speak again of the want of phosphates alone not constituting rhachitis, the amount of these salts slowly assimilated for the formation of some teeth is very small in proportion to what is contained in the food. But surely, the largely diminished amount of phosphates introduced into the system (not only into the stomach), as being the result of the rhachitical process, well explains the slowness with which the teeth form and protrude in rhachitical children, and the simultaneous retardation of walking, and the slow ossification of bones generally. At another place, and in a former lecture also, I have spoken at some length of these matters. Thus we need not wonder that a rhachitical child who has no tooth at a year or later, cannot walk at the normal period, nor that its cranial sutures and fontanelles are not closed before the second or third year. But these latter anomalies do not depend on the retardation of the appearance of teeth, but all of them—retardation of the closure of the cranial bones, retardation of walking, and retardation of the protrusion of teeth—all of them are to be considered as the contemporaneous and co-ordinate results of the same fundamental morbid process.

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from page* 19.)

At the time this woman was in the hospital, there were two others under my charge in whom these same symptoms were the only urgent ones; and during the six months that Dr. Thomas was house physician, he collected in the whole hospital seven similar cases, including these three, and published them in one of the journals.

Convulsions are not very unfrequent in both of the forms of Bright's disease that have been referred to, and I suppose that we are compelled to infer that they are the direct effect of the ureal irritation upon the cerebral matter, inasmuch as the experiments of both Frerichs and Hammond show that when urea is injected into the circulation of animals, convulsions will be the result, if it be not promptly eliminated. We find also that in a certain class of cases, convulsions are rather to be looked for when we know that there is urea in the blood, or at any rate albuminuria. This poison seems to have the same tendency to the brain that opium has, operating, however, differently: that is to say, its vital affinities are for the cerebral matter. It is true that convulsions are not among the most frequent symptoms of Bright's disease, still they are the most alarming when they do occur. It is worthy of note, that in some of the cases in which the contracted kidney is the characteristic of the disease, it is the first symptom that attracts the attention. I could cite a good many instances, illustrating this point. I will, however, refer to but one, that occurred in the practice of Dr. John C. Cheesman.

Three years ago a merchant in rather delicate health, but still sufficiently strong to pursue his business, was suddenly and unexpectedly seized one evening with convulsions. He had not previously been sick enough to consult a physician. He had several of these attacks in the course of the night, and died in the course of the next day. The

post-mortem examination revealed the existence of contracted kidney, and no other disease which could have caused his death. One of the kidneys weighed only an ounce and a half. Several similar cases, though not terminating so suddenly, have come to my knowledge, or under my observation. It is not uncommon to find these convulsions where œdema exists. I remember that in the fifteen cases that I gave the history of to the students at the hospital, there were three in which convulsions were a striking feature, and in one the cause of death.

Another important fact in these cases, is the very singular and marked tendency to inflammations of a grave character. One-half of the cases reported by Wilks died of acute inflammations, and among these are recorded pericarditis (a little more frequent than the others), peritonitis, pleurisy, inflammation of the meninges of the brain, pneumonia, erysipelas—inflammation of the leg, spontaneous, in one case, and occurring from acupuncture in another, and so on. I have looked into Bright's famous one hundred cases, and find the same thing true, that about one-half died of acute inflammation. My own cases teach about the same lesson, as will be seen further on.

I will next state a practical circumstance of considerable importance, and hope with it to conclude my remarks this evening—it is the peculiar influence of certain powerful nervine medicines upon those whose blood is more or less loaded with urea. It has been my fortune to see in one single week three persons die from taking doses of morphine or other opiates, that would have been safe under ordinary circumstances. In one instance, one-half a grain of morphine produced death; and in another instance, forty drops of laudanum were given in the evening and the dose was repeated in the night for a pain in the finger, caused by—I do not remember what—and the next day the young man died, and I witnessed his death. In another instance twenty-five drops of laudanum produced the same result in a child eleven or twelve years old, and in this latter instance it was given for some supposed inflammation. The mode in which death occurs under these circumstances, is a little peculiar. It is not always from a profound opiate narcotism; the patient in some of the cases is disposed to move from side to side, and to moan more or less, but he does not pay any attention to questions that are asked him. The pupil is not contracted. The pulse grows more and more frequent, more and more feeble, until it finally ceases to beat. In some of the cases a sort of half coma, not unlike that produced by opium alone but less profound, seems to be the termination, rather than the restlessness. When once these unpleasant symptoms have shown themselves, I have never seen them relieved; I have come, therefore, to be exceedingly cautious in the administration of large doses of opiates, where it is known that there is Bright's disease. The same thing is true of certain other medicines that have a decided influence upon the nervous system. This will perhaps be better illustrated by the synopsis of a case:

In the practice of Dr. Hyslop was a young woman that had pericarditis, and it was not known that she had Bright's disease. She was taking a moderate amount of digitalis, and the doctor came to me one evening, saying that her pulse had gone down suddenly to thirty or forty, and that she was in a good deal of distress. This was a result which could not be explained by the dose of the medicine that was given. I said to him, "we will go down and see her, and I have no doubt we shall find albumen in her urine." We took a test tube with us, and it was as we supposed. This young woman did not die in this condition, although she suffered a good deal of distress, and her sense of sinking was very marked. Her pulse finally came up to a safe standard, and she afterwards died of complications of the principal disease.

I have found the same results follow the use of veratrum viride and aconite, and I have been half tempted to believe that the digitalis has no more the cumulative effect that is ascribed to it than most other remedies, but that it has earned for itself such a reputation by its action in cases where there is urea in the blood, the urea aiding the medicine in producing its effects upon the nervous system.

May 21.—It will be remembered, Sir, that at the last meeting of the Academy I went over a considerable number of the symptoms that frequently attend albuminuria, and made several general statements with reference to the nature of the disease. These latter I shall not now recapitulate. Among the symptoms then considered were the amaurosis, which was supposed to depend in a considerable degree, if not wholly, upon a fatty degeneration of the retina; the flatulent dyspepsia; the distressing sensation across the region of the stomach; the flatulent condition of the intestine; the vomiting, sometimes almost the only existing symptom; the acute œdema of the lungs; the dyspnœa, sometimes nervous, sometimes depending upon this œdema; inflammation of various organs of the body; convulsions; the intolerance in persons whose blood is laden with urea of certain medicines that affect the nervous system, like opium, veratrum viride, aconite, and digitalis; and the cachexia. These were the symptoms that were reviewed when I first had the honor to have the ear of the Academy upon this subject. I propose now to consider a few more of the symptoms somewhat in the same manner, and then go on to some other branches of the subject.

Among the occasional symptoms that I would remark on, is *headache*. This is by no means a constant occurrence in the progress of Bright's disease of the kidney, but it occurs often enough to make it worthy of mention, and when it does occur it is apt to be of considerable duration, and is also apt to be a source of a good deal of inconvenience. I know of no definite explanation of the symptom, but its occurrence in men especially, deserves consideration, inasmuch as they are not very subject to headache except for special causes.

Pain in the back is usually enumerated as one of the symptoms of Bright's disease, but I have learned to consider it of very little importance. In the early study of the disease I always inquired for it, and if it was not present, I had the conviction that it was very likely that no such disease as I was seeking for existed. The more I have sought for it, however, the less I have been taught to rely upon it. It is more frequently absent than present. If the sensation be a dull aching in the loins, extending downwards to the hips, thighs, and organs of generation, it may have its origin in the kidneys; but the pain most commonly complained of is seated in the muscles of the back. I name the symptom for the purpose of saying that it does not deserve that amount of consideration which is usually given to it.

Difficult Diaphoresis.—Another circumstance frequently enumerated among the symptoms is worthy of passing notice, that is the difficulty in some cases in procuring a free diaphoresis. It is almost always stated in books upon the subject, that a dryness of the skin and scanty perspiration mark this disease. This is certainly true of a proportion of the cases as they are seen in the hospitals where the diaphoretic plan of treatment is resorted to—but I do not think that such is the case in the majority of instances. Now and then a patient will be found whose surface becomes very red under the influence of heated air, or the hot air bath, as it is sometimes called. He may suffer from the symptoms of an artificial fever, so to speak, without perspiring afterwards, and yet it is true that many can be made to sweat as freely as other persons, and in these, of course, the employment of external diaphoretics will be most effectual.

In regard to the condition of the urine:—I suppose, sir, that there is nothing more variable than the quantity of urine voided by different patients in Bright's disease. I believe, however, it is very generally true in the beginning of the disease, and at the end of it, that the urine is scanty and often high-colored, but in its progress, after the disease has lost the influences of the first congestion, it very often becomes copious, and continues so for a length of time; it

becomes pale, and is usually of a low specific gravity. I observe that Dr. Bulkley, in a lecture recently published in the *American Medical Times*, refers to a certain number of cases observed at the N. Y. Hospital, in all of which a large quantity of urine was passed—in some of the cases the amount equalled a hundred ounces daily. This I am compelled to believe is an unusual quantity. I have had some observations taken with reference to this fact—they are, however, not very extensive, and consequently not very reliable. In five of the cases, where diaphoretic medicines were taken, the quantity of urine was considerable, but where the kidneys were not stimulated the quantity was not very great. As for example, a patient taking Rochelle salts gives the following quantity of urine passed during each of eleven days, 80, 72, 74, 64, 54, 45, 50, 58, 74, 34, 32 ounces. Another who was taking iodide of potassium, passed 67, 62, 65, 50, 52, 54, 34, 30, 34, 24, 36, 34 ounces. In another who was not taking any medicine, we have the following figures, 25, 20, 16, 20, 34, 27, 30, 34, 38, 44, 40 ounces. In another the quantity passed per diem was measured in pints, 3, 3½, 2½, 2½, 3, 3½, 3, 4½, 3½, 3¼. That is sufficient for an illustration. I say again, the quantity varies markedly, and I believe the general rule is that if diuretic medicines are not taken the quantity of urine passed is smaller than in health. It is specially noticeable in a considerable number of these cases, as the disease is approaching an unfavorable termination, that the quantity of urine diminishes, so that often during the last thirty-six or forty-eight hours the amount does not exceed a few ounces; sometimes it is entirely suppressed. Almost always when this condition occurs, it is noticed that the urine, when any is passed, is either bloody or of a very high color. I suppose there is no more unfavorable symptom than suppression or very marked diminution in the quantity of urine.

With reference to *albumen, blood casts*, etc., in the urine, I shall refer to them another evening, as I am not yet prepared with a resumé of my observations. But I will say now, while it is well known that albumen is found in the urine in the great majority of cases of Bright's disease, there is a considerable proportion still left in which this substance cannot be discovered up to the hour of death, or perhaps only in the last few days of life; still, all the other symptoms may be marked enough to authorize a diagnosis. The absence of albumen, then, is no proof that Bright's disease does not exist, and for purposes of diagnosis we look for the casts. These are only discoverable, as is well known, by microscopical examination. They vary very much in character. There is the transparent model or a cast of the uriniferous tube, so perfectly transparent that it is called sometimes hyaline, though called also sometimes waxy. These are composed of an exceedingly pale, uniform substance, without granule or globule, cell or nucleus, upon them, and are only seen from the fact of their having a little higher refractive power than the medium in which they are placed. Then to this hyaline cast as a basis are often added granules, fat globules, cells of the uriniferous tubes, and nuclei. These casts are sometimes filled with blood that seems to have undergone a kind of coagulation; and these several forms are called granular casts, fatty casts, blood casts, etc., and I will here remark that the blood casts are not simple coagulations of blood in cylindric forms, but they are also encased in these hyaline tubes. These casts occur, one or other of them, in the great majority of cases of Bright's disease, whether albumen is present in the urine or not.

(To be Continued.)

In the year 1860, for which the returns have just been issued, 14,775 persons in England and Wales died a violent death—one person in every 1,328. Nearly 13,000 of the deaths are ascribed to accident or negligence; among them 5,417 were caused by fractures and contusions, 1,061 by suffocation (760 at not a year old), 2,264 by drowning, and 3,166 by burns and scalds.

IS IRIDECTOMY A NEW OR OLD OPERATION?

By JULIUS HOMBERGER, M.D.,
OF NEW YORK.

A paper with this title, published in a previous number of this Journal, by our excellent confrère, Dr. John O'Reilly, contains several points which seem to me not entirely acceptable, and I beg leave to submit, in response to it, the following remarks:—

The term "iridectomy" has become identical with the term "artificial pupil," since the methods of "iridodialysis," tearing the iris from its ciliary insertion—and of "iridectomy," dividing the iris with a sharp instrument in a radial sense—have both grown obsolete: an iridectomy produces always an artificial pupil, and an artificial pupil is the result of an iridectomy.

Cheselden was the first to perform an operation on the iris with a view to procure the rays of light an entrance in the eye, and since his time the operation, frequently modified, has been executed in numberless cases of obscuration of the cornea covering the pupil, or of closure of the pupil by inflammatory processes. *The object of these operations was a mere optical one.*

De Graefe, our illustrious master, first found an indication for the operation of iridectomy in two forms of disease, glaucoma and iritis. In these the operation is not executed for an optical but for a therapeutic purpose.

A disorganized state of the vitreous, according to Dr. O'Reilly, with increased secretion of the aqueous humor, causing convexity of the cornea, together with almost complete closure of the pupil, thus precluding the entrance of light into the orbit (?) and consequently preventing the formation of external objects on the retina, thus, in truth, rendering the individual blind, caused De Graefe to perform iridectomy.

I may be allowed to state that this is not the idea of De Graefe. Glaucoma depends, according to him, on a peculiar exudative inflammation of the uveal coat. The symptoms of this inflammation are excavations of the papilla of the optic nerve, dilatation of the pupils, anæsthesia of the cornea, hardness of the globe, ciliary neuralgia, etc.—all of which are the consequence of the *increased intra-ocular pressure*. This pressure causes the disc of the optic nerve to be cupped, produces paralysis of the sphincter pupillæ and anæsthesia of the superficial ramifications of the quintus nerve of the cornea; the hypersecretion of the choroid makes the globe more resistent, and the neuralgic affection is explained by mechanical irritation of the ciliary branches of the trigeminus.

I must further observe, that the German surgeons—I proceed to the fourth point of Dr. O'Reilly—do not mean to attribute the effects of iridectomy to the quantity of blood lost during the operation and the escape of aqueous humor, but *to the diminished intra-ocular pressure following the division and excision of the iris.* I believe that the change in the conditions of pressure in the eye, effected by the division of a group of muscles, has a parallel in the influence of division of the sphincter ani in certain diseases of the rectum, and incision of the circular muscular fibres of the vagina in vaginismus.

It is particularly the answer on the sixth question, "*What then is the true explanation of the good effects from the operation as performed by De Graefe?*" which we cannot pass.

The enlarged condition of the pupil is of no use whatever for the sight; on the contrary, it produces a dazzle—besides the pupil, in cases of glaucoma, is dilated almost ad maximum. An infinitely small pupil is large enough to allow distinct vision. Iridectomy for "myosis and cases of contracted pupil by continually looking at the smallest objects" (?) will never be indicated, as the use of atropine will not fail to dilate the pupil.

The second indication for iridectomy De Graefe found in cases of chronic iritis and irido-choroiditis, with extensive posterior synechiæ and exudations in the pupil. The shoots

of these affections invariably form attacks of acute iritis, with exudations in the pupillar space. The extension of the iris has not the object to open the eye to the rays of light, as there mostly exists a sufficiently large pupil—its aim is principally to restore communication between the anterior and posterior chamber, and to remove the nutrient of the exudations in the pupil, and the pupillary margin.

De Graefe and his pupils have obtained the most gratifying results from this procedure. Eyes, with totally disorganized iris, where the inflammation of this membrane had caused the choroid to participate in the inflammation, and where all the sure symptoms of choroiditis, amblyopia, narrowness of the field of vision, and *even the beginning of atrophy of the globe* existed, were restored to a certain degree of sight. After the excision of the iris the anterior chamber became again of normal depth, the iris a more natural appearance. The symptoms of choroid inflammation disappeared, *the bulbus readopted its normal size.* The exudations in the pupil became atrophied, and the power of vision in many cases reached to almost a normal height.

The analogy of Mr. Ryan's case, quoted by Dr. O'Reilly, with this group of diseases is evident. But Mr. Ryan, according to his own words, operated *for the obliteration of the pupil.* That he selected a case with the symptoms of chronic inflammation, and dared to operate on a heavily disorganized eye—at a time when an inflamed eye was considered a *noli me tangere*—proves his courage as an operator; but the one remark that "this case had been selected as the most unfavorable that could present itself for the performance of the Cheselden operation," sufficiently proves that he merely executed the operation for *the production of an artificial pupil,* FOR AN OPTICAL PURPOSE.

I therefore believe that the honor of the institution of iridectomy as a *method for the cure of inflammatory processes in the eye,* has still to be attributed exclusively to De Graefe.

Dr. O'Reilly, in the course of his paper, after the designation of Mr. Ryan's case, enters into some remarks on the nature of glaucoma, which to discuss all would lead us too far. We beg leave to remark briefly, that "the augmented convexity of the cornea in glaucoma and glaucomatous disease, or in consequence of the action of the recti muscles in looking at small objects," are mere theories, in which, it is true, many writers on ophthalmic surgery used to indulge. The recent investigations of the process of accommodation, carried on with mathematical exactitude by Helmholz and others, have proved that neither cornea nor recti muscles have any part in the act of adjustment—that the surface of the cornea does not change its convexity, and that the recti muscles do not by their contraction exert any influence on the shape of the eyeball.

The ideas prevailing in regard to the nature of glaucoma have been so greatly changed since the invention of the ophthalmoscope, and through anatomical and microscopical examinations of pathological specimens, that Beer cannot any more be quoted as an authority on such matters. The changes in the hyaloid and the areolæ of the vitreous body (?), as well as the varicose state of the veins of the choroid, are, if they exist, certainly no pathognomonic symptoms of the disease. To put the changes of circulation in glaucoma on account of the contraction of the recti muscles, is evidently mere speculation. Why should they influence the circulation in disease, as they never interfere with it in a normal eye? Is their contraction modified in glaucoma? Then we would have to consider glaucoma as a disease of the eye muscles.

Altogether, Dr. O'Reilly's remarks are quite *à-propos.* I see with pleasure the subject of iridectomy ventilated, as the object of De Graefe in performing this operation is, it seems to me, only very superficially known here. In a paper on "The Operations of the Eye," published in the *Transactions of the American Medical Association* (1860), by Dr. Patten, of St. Louis, it is but briefly and incorrectly represented; and the single fact of the reprinting of the whole of the valueless article in the "Transactions," bears sufficient proof how very little knowledge of and interest in this part of surgery exists in this country—assuming that the American Medical Association is to be considered as a body of enlightened representatives of the medical profession of the United States.

Iridectomy is undoubtedly the most important discovery in ophthalmic surgery, which has been made in this century, and has already raised a revolution in all operative oculistic procedures; but it cannot serve the interest of suffering humanity until deep-rooted prejudices as to the danger of the operation and its indications have been perfectly eradicated. The operation shares the fate of almost all great discoveries, and science waits ever patiently, cultivated by a few only, until all its apostles have become converted to the particulars of its progress!

BULLET WOUND EXPLORATION.

By RUFUS KING BROWNE, M.D.,

BRIGADE-SURGEON U.S.A., AND CHIEF MEDICAL OFFICER FOR NORFOLK, VA.

An extremely simple change in the usual means to reach the end of a bullet track—the place of lodgment, or of following the track into and out of the tissues, has enabled me to succeed more frequently than usual; particularly in case the course of the track was either angular, or described a bend, or was in part tortuous. This change is to bend more or less abruptly the probe near its end. If a straight or slightly curved probe be introduced and pushed into the entrance of a bullet wound, its end will be detained at the first turn, bend, or deflection, which is the beginning of the second direction, and withheld from going further: if, moreover, the effort to carry it beyond be continued, by moving the hand, holding the outer end to and fro or around, the inward end will change its position very slightly if at all, and cannot by means of any movement of its outer end be diverted or carried much if at all from the spot of its detention; and should the extension of the wound from here be in a different direction at an angle or abrupt bend, the point will not be turned to engage the continuation of the track. If, however, a bend exist near the probed exploring end, so abrupt as to form an apex, this will rest against a variable spot in the wall of the track, above what would be in the first instance the point of detention:—but in the latter instance, if any detention occur, when the hand is moved to and fro, the apex or the bend will carry the point in a different direction and into any part of the track beyond which it continues in that direction. In all the wounded by bullets which reached the "Naval Hospital," Portsmouth, on the 9th of June, nearly 500, every bullet wound in which I saw and examined, this simple expedient of which I made no mention enabled me to follow the track, whether it terminated in the tissues or found a canal through and out of them, except in cases where the track opened into the thoracic cavity, or terminated in the pulmonary tissue. This expedient will be found to succeed perhaps in all cases where the track of the wound turns or bends in two or three directions. The bend in the probe should usually be about the distance from the probe point of the last joint of the finger from its tip. Although previous to being a witness to any bullet wound, I held the idea, having thought of it as an occasional change in the form of the catheter to prevent its becoming arrested in the urethra, I have never mentioned it except in one instance it succeeded readily, when the probe of uniform curve, in the hands of a perfectly skilful explorer, failed.

The case was a soldier who while in battle resting upon his right knee, the other flexed at a right angle, was struck by a minié ball which passed into the anterior muscle of the left hip, through behind the pubes, into and out of the bladder, and lodged a little to the right of the raphe, in the perineal fascia. Here there was a large fistulous gap leading to the neck of the bladder, from which dribbled the urine, and which in fact turned out to be of fistulous character, the ball being found just above and behind its

edge. At first the professional examiners, three, could not content themselves that one ball had made so various a wound—and the only way of ascertaining the fact was to explore and find a continuous canal from the orifice in the thighs to the fistulous opening, of which in these two points were the undivided termini. The exploration by the probe, as usual, was done, but failed to carry the probe beyond a certain point. The surgeon in charge, a most skilful and successful one, was abandoning the attempt, when permission was granted me to explore. The slight bend in the catheter I have stated, was made, and the end of the probe without detention in the track appeared through the fistulous opening. The first exploration had been arrested by an abrupt turn about the middle of the track, and this involved a second turn a little beyond. This expedient is simple, but perhaps will be found successful in all hands. Of course in the exploration of wounds, we all need to practise the lessons we have been taught respecting the handling in the introduction of the catheter. *No force must be used.* That I have never seen the probe used in bullet wounds as the catheter *should* be, is a very unpleasant experience in the army. I am satisfied that the best probe in any bullet wound, but very superficial ones, is the soft metallic or the lead probe—not because it is *softer* to the tissues, but because it can be instantly curved or bent, even when a part of its length is in the track of a wound. And the only forceps which should be used for the withdrawing of bullets is the mouse-tooth forceps (Thomas) described by my friend Prof. Hamilton, Brigade-Surgeon, U.S.A. The spoonbill or the dressing forceps can scarcely be prevented from inclosing in their grasp of the bullet (when that is accomplished), more or less of the tissue, which closed partly over the bullet; and this is to be torn by traction from its connexion in the withdrawal of the bullet. They are best only for the removal of spicula of bone, cloth, coagula, or anatomical debris.

CASE OF

ANEURISM OF THE ARTERIA INNOMINATA.

By CHARLES K. BRIDDON, M.D.

SURGEON OF THE NEW YORK DISPENSARY.

The patient was a stout, robust Englishman, of 36 years. He came under my treatment in the middle of September, of last year: he was suffering at that time from cough, stridulous in character, with scanty expectoration and occasional dyspnœa. On making a physical exploration of the chest, I found the percussion note clear everywhere, unless it might have been a shade duller below the sternal half of the right clavicle, and over the manubrium sterni; this was not clear, however, for the thoracic walls were so cushioned with fat that it was difficult to note a slight difference. Auscultation revealed loud, sibilant, and sonorous râles everywhere present. Over both lungs, the cardiac sounds were somewhat indistinct, but normal; there was no bruit over the region of the heart or great vessels. He was treated by expectorants, occasionally combined with anodynes and antispasmodics, but was in no way benefited thereby; paroxysms of dyspnœa became more frequent, and during several of these attacks, which were accompanied with convulsive coughing, he became vertiginous, and on one occasion lost his consciousness. He continued to attend to his business until the 28th of November, when I visited him at his house. He had had several attacks of convulsive coughing, during which he became purple in the face, and his dyspnœa was so great that he could not assume the recumbent position. On the 29th and 30th his condition was about the same; and during these three days he had sat in a chair, resting his arms upon the back of another placed in front of him, and he could not be induced, nor was he urged, to assume any other position.

On the evening of the 30th, I could detect no pulsation in the right radial artery, and it was indistinct in the other branches given off from the same source; I carefully examined the region of the thoracic aorta, but could detect no bruit of any kind; but on the strength of the absence, or feeble pulsation in the vessels supplying the right upper extremity, I expressed my fears of aneurismal or other obstruction existing, and suggested a consultation with Prof. Clark, who visited the patient on the 30th. I did not take notes of the very careful examination made by the professor; he traced dulness occupying the upper portion of the sternum, directed my attention to a sound conveyed to the ear placed over the vertebra prominens, which gave the impression of tracheal compression; the air sounded as if it labored through a narrow chink, at least such was my conviction; no bruit was discovered, pulsation was very feeble in aforementioned vessels. And from these facts, I think he coincided in the diagnosis as to aneurism, or other obstruction, exerting pressure upon the trachea.

On the 31st, the patient was decidedly better, his breathing was more easy, and the pulsation in the right radial was easily made out; he spoke of his amendment in good spirits, and looked every way so much improved that I hoped the danger was averted for the time. I was sent for at 6 P.M., and found him dying, seated as I had left him in the chair. I attempted to administer stimulants, but desisted, and in a few moments he was dead.

I obtained the autopsy, which was made twenty hours after death. The thoracic parietes were loaded with fat, veins of the neck gorged, and discharging when incised a large quantity of black fluid blood. Lungs were somewhat emphysematous and adherent by old adhesions on the right side. Pericardium contained several ounces of serum; the heart was healthy.

Immediately above the semilunar valves of the aorta was an aneurismal pouch about the size of a goose's egg springing from the ascending portion of the arch; the opening into it was circular, about an inch or an inch and a quarter in diameter, and the lining membrane of the artery was continued over the margins of the opening into the sac, which was lined to the thickness of three-quarters of an inch with laminated fibrine. Above and behind this sac, was another of smaller dimensions pressing upon the trachea, and incorporated with it in a mass of condensed areolar and new tissue; the vagus of the right side was embedded in this deposit; from the top of the smaller sac arose the right carotid and subclavian, and the mouths of the vessels, as they arose from the sac, were compressed laterally by the elevation of the sac itself. The lining membrane of the trachea and bronchi was of a dusky red or maroon color; but at the point of compression there were no marks of thinning or ulceration.

From the appearance of the parts as represented in the above description, it is probable that the sac was formed out of the dilated tunics of the arteria innominata, and also of that portion of the aorta from which it springs.

A CASE OF

AN ENCYSTED CERVICAL TUMOR,

PECULIAR FROM THE IDIOSYNCRASY OF THE PATIENT.

By H. LASSING, M.D.

Arabella J——, æt. 17, of a strumous diathesis, was brought to my office for treatment of a cervical tumor, which one of the advertising fraternity had pronounced as "*chronic mumps verging into cancer.*" Upon examination I found an encysted tumor in the region of the cervical glands, commencing between the ramus of the jaw and mastoid process on the left side, and continuing down below the angle, which caused a protrusion in the throat, evidently by pressure upon the point of the styloid process. The hearing upon the side where the tumor was situated was slightly impaired, the stenonian duct on that side effused little or no saliva, the parotid gland being also slightly affected. Respiration with closed mouth difficult.

This had been first noticed about two years before I saw

the patient, and at first, sharp, shooting, lancinating pains were felt through the tumor; the tumor has gradually increased since. Patient has wasted away somewhat, appetite poor, habitually costive, and affected with leucorrhœa. Menstruation normal.

She has taken all the popular nostrums of the day, and been treated by Dr. Newton, and all the rest of his stamp. She has also been under the care of several medical men of eminence, but would not persevere, otherwise she would no doubt have been cured. In order to restore her general health somewhat, I prescribed purgatives of various kinds, to enumerate which would take more space than you can afford me; but none of all in the pharmacopœia, no matter in what shape it was administered, would act so as to produce a stool, without being attended with inconvenient and unpleasant symptoms, such as excessive emesis, hæmatemesis, melæna, hæmorrhoids, and sometimes menorrhagia. Only two remedies acted well, however, for a few times only, viz. a soap suppository, and enemas of cold water. Her stomach was extremely irritable, and could hardly bear anything in the shape of medicine, even if pleasant to the taste, or inclosed in capsules. When she attempted to take it she experienced spasms in the throat, and after it had passed into the stomach, she would retch and most generally eject it. Enemas produced colic, violent purging, and extreme pain. Bitter tonics were out of the question, her stomach would not retain them; acids fared no better; ferruginous preparations she could not be made to take, no matter how disguised; any persistence in an attempt to administer being always followed by a state bordering on catalepsy. To apply any liniment or ointment to the part had equally injurious effects, and in addition produced excoriations and extreme irritation. Once when the tumor was painted with very dilute tincture of iodine, she was thrown into convulsions which lasted forty-eight hours. I tried every remedy I could hear of to allay the irritation of her stomach, when I found, to my great surprise, that she would willingly drink large quantities of a tea of eupatorii foliæ, although she could not take any other bitter preparation, and could drink it more readily if aromatic stimulants were added. I administered this to her in large quantities, together with the lobelia inflata et laurus foliæ, which produced a copious alvine evacuation, and very easy but thorough emesis. Upon examination of the utensil which contained the matter ejected by the stomach, a very thick, foul, reeking, slimy mass was found floating on the top. In appearance it much resembled a placenta after delivery, and seemed to be composed of mucous and bilious particles. The liquid underneath was a dark brownish fluid, of the consistence of muddy water. The patient during, and after this operation, remarked, that this was "the easiest vomiting" she had ever had. After this I found no trouble in administering medicine to her, although I had tried various emetics unsuccessfully before. The irritation of the stomach recurred twice more during the treatment, but was each time conquered by the lobelia and laurus foliæ, administered in small quantities.

As to the tumor, by alternating stimulating embrocations and unguents, preventing irritation, and improving her general health, it was reduced about one-half by resolution, her hearing improved, respiration became more easy, and more saliva was furnished. Great care had to be used, as everything applied was quickly absorbed, and followed by constitutional symptoms. When it was found that nothing further could be gained by resolution, a resort to the knife was again proposed, but she would not submit to this. To administer chloroform or ether was impossible, as, from her previous experience, she had been thrown into violent convulsions by their mere smell in a dentist's room. I then applied electricity, as a tonic, stimulant, and anæsthetic; it acted as such, and answered every purpose. As a stimulant, it acted in two ways; as a direct stimulant, and by the contractions produced by it, particularly of the sterno-cleido-mastoideus. When a bistoury was connected with the negative pole of a direct magnetic current, and the conductor of the positive pole held in the patient's hand, no trouble was experienced, and incisions could be freely made into the cysts, without inflicting pain. From these incisions large quantities of suppurated matter of a cheesy appearance exuded, which were eventually succeeded by small quantities of dark venous blood. When no more exuded, the sac was taken out, using electro-magnetism as the anæsthetic, and the wound healed up quickly by first intention, leaving but a small rectangular cicatrix. The tonics were continued for several weeks. Now, three months after the sac has been taken away, the patient looks much better, having gained some twenty pounds in weight, and her general health is good. No tumefaction of the part has since taken place.

Reports of Hospitals.

HOME FOR SICK AND WOUNDED SOLDIERS.

SEVERE CASE OF GUNSHOT WOUND—DEATH—AUTOPSY.

[Reported by DR. A. E. M. PURDY, House Surgeon.]

CHARLES MUNSON, private, Co. K, 2d Regiment, N. Y. S. M., while working in the trenches at Yorktown, received a shell wound in the elbow, and also a gunshot wound in the back, at the top of the sacrum. After being wounded he was able to walk some distance. He was sent to the General Hospital at Yorktown, and while there several pieces of bone were extracted from the wound in the elbow-joint. The wound in the back gave but little trouble.

Upon arriving at this hospital, May 25th, the arm was permanently flexed, presenting at the elbow an extensive fungoid appearance, the wound being five inches in length and three in breadth, causing the most intense pain. The wound in the back healed kindly, giving little or no trouble. Simple water-dressings were applied to the elbow-joint; but the treatment was without avail, and as the system was greatly below par, and nothing was to be gained by delay, it was therefore determined to amputate. On the 31st of May, the ordinary circular operation at the middle third of the humerus, was performed.

The patient appeared to do well until the 4th of June, when he complained of great pain in the knee, followed by a violent chill; brandy, quinine, and warm applications were used to restore warmth to the circulation. Another chill of less violence succeeded in the afternoon of the same day, after which the temperature of the affected limb being slightly increased, with a pulse of 140 per minute, it was thought advisable to administer the following prescription:—℞. Tr. aconiti rad., gtt. xvj.; aq. ʒ ij.; M. To be taken in teaspoonful doses, every second hour.

In twenty-four hours the pulse was reduced to 100, when the aconite was discontinued.

The temperature of the leg continued above the normal standard, with pain and excessive swelling, causing tension of the integument. It now became necessary to give twenty drops Magendie's sol. morph., to insure sleep. The wound in the back at this time was almost healed.

Together with the chills, which had now lost somewhat of their strength, profuse perspiration at the time set in, which weakened still more his already debilitated frame.

The quinine, which he had been taking in the form of pills, was now ordered in solution, with the excess of the acid sufficient to make ten drops to each dose, given every fourth hour. This treatment somewhat relieved him.

About two weeks after the commencement of the attack, he began to complain of his mouth, with great difficulty of deglutition. Upon examination cancerous ulcers were found upon the tongue and mucous membrane of the mouth. Chlorate of potassa was used, but with little benefit; also sodæ biboras, with honey, and various other remedies, but all to no purpose. During the course of the disease there was a very troublesome diarrhœa, alternating with consti-

pation. The chills continued, but of a more feeble character. During this time the wound from the amputation was not progressing favorably; the discharge was scanty, and the stump painful when moved. The leg in the progress of the disease became smaller, and at the time of his death assumed the normal size.

All remedies failed to afford relief, and he gradually sank, dying on the evening of June 29th, thirty-five days after admission, and thirty after the operation.

Autopsy ten hours after death.—An incision was made along the course of the femoral artery, and upon coming down to the sheath of the vessels, they were found so firmly adherent that they could only be separated with the greatest difficulty. The artery was perfectly normal, and the vein greatly distended, with irregularities in its calibre at different parts, and in tracing it out, one of the smaller branches being divided, a considerable quantity of pus escaped.

The greatest amount of disease was about Poupart's ligament.

On continuing the dissection beneath the vein on the upper third of the thigh, the scalpel cut into quite a large abscess among the muscles.

Upon removing the whole of the femoral and internal iliac veins, and dividing the former, a complete plug of blood and pus was found.

A considerable interest having arisen as to whether the wound in the back had any connexion with the venous trouble, a thorough examination revealed no such trajet of the ball.

The wound in the back was no doubt produced by a piece of the same shell which caused the wound of the elbow. The kidneys and lungs were in a normal condition; the liver gave no evidence of venous trouble.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, May 14, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

ANTE-MORTEM CLOT.

DR. AUSTIN FLINT exhibited a heart, in the left ventricle of which was found an ante-mortem clot, white and dense, arranged so as to form a coil partly around the columns of the mitral valve, tying it together. The liver and kidneys were fatty, the former weighing nine pounds. The symptoms immediately preceding death were, a feeble pulse and dyspnœa. The patient was in a semi-erect posture at the time death occurred. Dr. F. called the attention of the Society to the accidental formation of clots in various diseases, and related two cases of pneumonia in which the patients of a sudden became afflicted with increased dyspnœa, the action of the heart at the same time becoming much enfeebled, and death following soon after.

DESTRUCTIVE INFLAMMATION OF KNEE-JOINT.

DR. FINNELL presented the bones of the knee-joint taken from a boy aged seven years, whose limb was amputated at St. Vincent's Hospital, May 19th, 1862. At the age of two years the left knee-joint was injured by a fall, and was followed by acute synovitis. The disease was allowed to proceed without any medical or surgical treatment, and at the end of one year the limb was flexed at an acute angle, the joint much enlarged, and a small fistulous opening on the inner condyle of the femur. At the end of the second year the dislocation of the joint was complete, the posterior surface of the femoral condyles resting on the articular surfaces of the tibia, projecting at least half an inch in front of the tibia. The boy's general condition was not much altered by the gradual process of the diseased articulation. He entered St. Vincent's Hospital in the early part of June, 1862, in order to obtain relief from the deformity which had now been existing five years. On consultation, it was decided to divide the hamstring tendons, and then by means of the weight and pulley endeavor to get the limb in better position. On the 8th of April I had the boy etherized, and proceeded to divide the tendon of the biceps, then the sartorius gracilis semimembranosus and the semitendinosus. The limb could be very little extended, notwithstanding all the tendons were freely divided. Cold water dressings were applied, and the boy put to bed. On the fourth day after the operation a five pound weight and pulley was adjusted to the limb, and enabled me to get the femur and tibia at right angles without much annoyance to the patient. On the 16th of April the inflammatory condition of the joint obliged me to dispense with the weight. The boy became feverish, lost his appetite, and was gradually losing strength. It was becoming evident that amputation was indicated. My term of service at the hospital having expired, the patient passed into the hands of Dr. Theubaud, who removed the limb by the flap operation on the 19th inst. A dissection of the parts shows the disease to have been much more extensive than was at first supposed. The cartilage covering the ends of the bones had almost entirely disappeared; only a small fragment could be seen near the insertion of the crucial ligament. In the vicinity of the divided tendons suppuration had taken place extensively, the fasciæ of the thigh and leg forcing the pus between the muscles. The patella was roughened, and the cancellated tissue of the tibia and femur were in a carious and softened condition. The boy is doing well after the amputation, and promises to make a good recovery.

EXTIRPATION OF EYE, ETC.

DR. NOYES exhibited an eye which he had removed two weeks before from the person of a medical man from the country, 36 years of age. The eye was lost in childhood by an injury which produced rupture of the globe, and for a period of many years it gave him no trouble, vision of the remaining eye continuing good. During the last three years, however, he began to have dimness in the sound eye, accompanied by muscæ volitantes. There was only occasional pain over the eyebrow of the lost eye. He came to New York in February last, and sought advice at the Eye Infirmary. There was posterior synochia present, and the pupil was reduced to two lines in extent. He was told that all the trouble was due to the injured eye, and that the remedy was extirpation. He returned home, not satisfied with the decision; but his eyesight deteriorated so rapidly, that at the end of a fortnight he again presented himself ready for any operation that might be deemed necessary. The injured eye was then tender on pressure, and he had suffered considerably from supra-orbital neuralgia. The vision of the remaining eye was then so much disturbed, that he could scarcely discern the heading of a newspaper. The operation of extirpation was performed, but he was soon after seized with suppuration of the cellular tissue in the orbit, which gave rise to very alarming typhoid symptoms. A puncture was made deep in the orbit, relieving the tension, when the urgent symptoms subsided. For two or three days the remaining eye was chemotic, and discharged considerably. Subsequently when this eye was examined, the synochia was found so extensive as to leave very little hope of restoration of perfect vision short of the formation of an artificial pupil. The examination of the eye that was removed showed that the choroid had undergone calcification, and the microscopic examination disclosed the presence of bony matter already developed.

TUMOR OF ORBIT.

DR. NOYES exhibited a second specimen, a tumor removed from the orbit of a young man, twenty-five years of age, who had always enjoyed good general health. At the time he first presented himself the right eye protruded to such an extent as that the edge of its upper lid was fully an inch in advance of the upper lid of the opposite

eye, and the centre of the pupil was half an inch lower than the corresponding point of the opposite eye. The patient stated that the protrusion of the eyehall had been of gradual development—in fact, he thought he had been born with it. It had never been painful, nor had it been attended with inflammatory symptoms. The vision of the affected eye was remarkably good; the same might be said of the movements of the eye. He had never suffered from any double vision. There was no syphilitic taint of the system, neither was there any hereditary predisposition to cancer. The lachrymal gland was pushed down to such an extent, as, when the upper lid was everted, to present itself at the edge of the palpebral conjunctiva. The tumor presented itself in the form of a process from the outer surface and upper edge of the orbit, and could be felt as a hard mass, as far as the supra-orbital foramen. Dr. Noyes was of the opinion the tumor was a production of some sort between the periosteum and roof of the orbit, possibly a cyst or fibrous tumor. The operation was undertaken with a view, if possible, of saving the eyeball. The incision was commenced at the outer angle of the lids, carried outwards three-quarters of an inch, and thence along the brow, terminating at the supra-orbital foramen. The tunica oculi being then slit up, the tumor was discovered attached to the foramen lacerum anterius. It was removed in different pieces. The gland which showed itself at the margin of the lid was only a secondary one; the main gland was found situated further back, and, the major part of it having undergone degeneration, was removed with the tumor; two or three stitches were taken in the conjunctiva and integument. Some hæmorrhage occurred in the orbit in consequence of the violent actions of the patient when recovering from the anæsthesia. The result was that two hours after, by the accumulation of blood behind, the eyeball was as prominent as ever. The hæmorrhage was controlled by compresses and bandage, which was kept applied for twenty-four hours, at the end of which time vision was found undisturbed. There was, however, subsequent sloughing of the cornea owing to his inability to close the lids, and at the end of four weeks there is a great deal of opacity. An abscess had also formed in the upper lid, causing contraction and distortion of the same. The movements of the eyeball were perfect. The tumor proved to be fibrous in character, presenting under the microscope fibrous tissue in abundance, with a large amount of free nuclei in the fibres.

Dr. Lewis Smith presented a portion of the base of the brain removed from a boy who died at the age of two years and eight months. He belonged to a healthy family, and during the past year had been in good health. During the first sixteen months of his life he suffered from two or three serious attacks of sickness, one of which was erysipelas, and in these attacks there were symptoms of convulsions, though none occurred. In the latter part of March the mother noticed that he was fretful at night, and on asking the cause he referred to his abdomen as the seat of his distress. Little attention was given to his complaint at first, but, continuing to grow worse, Dr. S. was called in to see him on the fifth of April. The little patient was then walking about the room. His head was large in proportion to the size of the body; his tongue was covered with a thick white fur; his stomach was irritable; bowels tending to constipation; the pulse and respiration were accelerated. There was no headache, no unusual heat of the head Slight uneasiness of the abdomen was complained of in the region of the umbilicus, but that was about all. A purgative dose of calomel was prescribed. At the next visit vomiting commenced, and continued at longer or shorter intervals until the tenth of April, despite every remedy. During these five days very little food could be retained upon the stomach. About the tenth of April, the sighing respiration and intermittent pulse gave rise to a suspicion of disease of the brain, and an opinion to that effect was expressed to the family. Counter-irritation behind the ears was employed, calomel as an occasional purgative, and also iodide of potassium, but to no purpose; the child died on the seventeenth of April. The sighing respiration and intermittent pulse continued to the last, and he was conscious up to within twenty-four hours of his death.

Autopsy.—Abdominal organs entirely healthy. The upper surface of brain was slightly congested, but there was no opacity of the membrane. The lateral ventricles contained about ℥i. of clear serum. The foramen of Monro was unusually large. At the base of the brain at different points, in the fissure of Silvius, and along the sides of the hemispheres low down, were deposits of tubercles, ascertained to be such by microscopical examination. No tubercles were found in any other part of the body, the mesenteric glands being perfectly healthy. In nineteen cases of Hydrocephalus that Dr. S. had preserved notes of, ten occurred in scrofulous children. He had also found that tubercular meningitis was more common in those children who were under one year of age when attacked.

The meeting then adjourned.

Progress of Medical Science.

TRANSLATED FROM THE FRENCH BY DR. P. F. C. DESLANDES.

HYGIENE OF MILITARY HOSPITALS.

(*Continued from* p. 23.)

As to the places of the beds in our military hospitals, they are against the piers of the rooms instead of standing against the windows whose fresh air might aggravate certain diseases or induce others, such as catarrhal affections, rheumatisms, neuralgia, etc. For the same reason the beds should not touch the walls, which partly suspend the circulation of the ambient air, and get impregnated with dampness in winter, and with heat in summer.

A bed rather elevated than too low preserves the patient from the unwholesome emanations of the surface of the floor, and facilitates medical exploration and the use of the different appliances of surgery.

Stretchers furnished with a straw mattress suffice for temporary hospitals for the army, or simply straw beds for the provisional ambulances; but we must avoid there as elsewhere the crowding together of the sick.

All the systems of artificial aeration of MM. Leon Duvoir and Leblanc, Thomas and Laurens, Van Weeke, Grouvelle, and Chevalier, having not had so far, apparently at least, a marked influence on the decrease of mortality, natural ventilation by means of opposite windows remains the simplest and easiest mode of aeration, if they have at their upper part lattices to preserve the patient from the direct contact of the air. The insufficiency or excess of natural, and the difficulties of artificial ventilation by means of apparatus which scatter the miasmata on the spot, without expelling or destroying them, have led to the use of a great many disinfecting agents. M. Nonat speaks highly of results obtained by permanent fumigation of dilute chloride of lime, placed in vases through the rooms and renewed every three or four days. The dangers of infection arise from the vitiation of the air, particularly at night, the natural excretions of the patients, their fœtid breath and perspiration, the expectoration of gases and liquids, alvine dejections, evacuations, and urinary fistulæ, all these joined to accidental secretions, the suppuration of wounds and ulcers, the putridity of hospital gangrene, are so many mephitic beds from which may arise the most formidable epidemics in ambulances and military hospitals, on the trail of armies in campaign, exhausted by all the fatigue and privations of wars, and above all, in the disastrous conditions of *encombrement* (crowding).

As regards the treatment of the sick in military hospitals, I may mention the advantageous influence of the first attentions given in the infirmaries or on the road by the physicians; ablution for each soldier that enters the hospital,

simple dressing for the wounds, water substituted for poultices, union by the first intention, replaced in many cases by semi-union, aided by position; rare dressing, which, like non-removable apparatus, offers such immense advantages in army practice, particularly in the midst of the dangers of crowding and the imminence of epidemics. I should mention also the progressive tendencies of the profession towards conservative surgery, and all the resources of therapeutics substituted now with more perseverance than ever, in operations. Let us not forget the happy results of regulation laws enforcing the inspection of the diverse uses and distribution either of medicine or food, and the carrying out of all the prescriptions of hospital hygiene.

A sufficiently substantial and restorative food even in cases of wounds and after operations has the happiest influence on the recovery of men exhausted by hæmorrhages, suppuration, want of food, and a prolonged confinement to bed. This, with well established ventilation, is one of the two conditions of celebrity of the London hospitals, where the operated are from the first day put under a generous diet: wine, beef tea, and opium in small doses. This treatment, without opium, but with substantial food, gives good results in campaigns and in ambulances, as well as in naval hospitals, against debilitating diseases, and particularly against scurvy. What then necessary is that the supplies should suffer neither delay nor diminution.

The daily tasting of the food by the chief health officers is a sure guarantee of the quality and quantity of the commodities furnished. A special register records their acceptance or rejection.

The exercise of walking, which obliges all the patients not confined to bed to leave their rooms, has a double advantage for both those indoors and out of doors. The lame themselves or paraplegic can take exercise in the open air in small hand-carriages. The Swedish movement cure of Lind would be very useful to our soldiers accustomed to gymnastic exercises.

Moral influences act also beneficially on the sick soldier: such as the pleasure of meeting friends, or of obtaining leave of absence, and the consolations which it is the peculiar duty of chaplains to bestow.

Let us add that the threefold superintendence, medical, administrative, and military; regular conferences on all the requirements of the service; the daily visits of the officers on duty to receive and record in a register the complaints of the sick; similar visits from the health officers; lastly the general yearly inspections, offer as many guarantiés for the salubrity of military hospitals.

A ward for convalescents should be attached to every establishment, and would be a means of emptying the sick rooms—a resource useful to the soldiers too poor or too far away from their families to ask for a furlough.

It is by the regular removal of a certain number of patients to other places, that military hospitals can also be preserved from the dangers of crowding. These evacuations should comprise the most able-bodied men and those affected with venereal diseases, able to support the journey.

The leave of absence granted every year to convalescents, the discharges delivered every three months to the sick of the army, complete, with the removals, some of the advantages of hospital hygiene; but all the soldiers cannot take advantage of these furloughs, and the wards set apart in each infirmary for the convalescents are no longer sufficient.

Two military hospitals might be erected for convalescents with marked advantages. There would be a larger number of recoveries, and a diminution in the leaves of absence and the discharges. The sojourn in the hospital would be shortened, and relapses foreseen by this measure, so desirable for the sanitary condition of the army.

Yellow Fever at the West Coast of Africa.—Bonny and New Calabar have been visited with the worst attack of yellow fever known for thirty-six years. Out of 110 whites, 75 have died within a month. Amongst the natives the mortality has been still greater.—*Lancet.*

American Medical Times.

SATURDAY, JULY 19, 1862.

DEATH-RATE IN HOSPITALS.

The mortality statistics of the London and Parisian Hospitals, as furnished by Prof. Lee, from the social science papers, in his communication to this journal last week, teach an impressive lesson. In the eleven principal hospitals of London, with a daily average of three thousand patients, the percentage of mortality ranges from 8·83 to 11·19 *per cent.* The nine largest Parisian hospitals, with a daily population of nearly four thousand, have a mortality ranging from 15·70 *per cent.*, in the Hospital Necker, and 21·64 in the Hôtel Dieu, to the shocking maximum of 35·27 *per cent.* in La Charité.

That this marked difference in rates of mortality is not owing to possible differences in classes of patients is evident from the fact presented in the same tables respecting mortality following amputations, a class of cases necessarily similar and with equally favorable chances of life in both cities. In London hospitals amputations give 25·3 *per cent.* of fatal cases; in Paris, 45·6 *per cent.*

The causes of this difference we may examine hereafter; the statistics are given to illustrate the difference in hospital death-rates where the causes of such disparity are equivalent to the causes of excessive mortality in hospitals generally. The steady diminution of the rate of mortality in the same hospitals under sanitary works of improvement would at once furnish the climatic argument in favor of such works of reform, and indicate the relations which they sustain to curative and preventive medicine. This was forcibly illustrated in the British military hospitals on the Bosphorus, from February to July, 1855. We copy from Miss Nightingale's evidence before the Royal Commission:—

Statistics of the Hospitals on the Bosphorus for six periods of twenty-one days each, commencing February 24th and ending June 30th, 1855.

Time.	Sick Population.	Cases treated.	Deaths.	Mortality.	
				Annual rate *per cent.* per annum in sick population.	Percentage on cases treated.
1855.					
Feb. 25.....	3.779	1.621	510	235	31.5
March 18...	3.806	1.650	237	125	14.4
April 8.....	2.803	1.190	127	79	10.7
April 29....	2.018	1.350	70	60	5.2
May 20.....	1.504	996	48	56	4.8
June 10....	1.442	1.266	28	34	2.2
And the twenty following days.					
126 days. [total.]	2.501 [average]	8.070 [total]	1.090 [total]	118 [average]	12.6 [average]

Here we observe the percentage of mortality on cases treated fell steadily, in given periods of twenty-one days, from 31·5—14·4—10·7—5·2—4·8 to 2·2 per cent., while the average residence in hospital fell from forty-nine to twenty-four days for each patient.

The sanitary condition and causes of improvement of those hospitals are thus stated by Miss Nightingale:—

"The sanitary conditions of the hospitals of Scutari were

inferior in point of crowding, ventilation, drainage, and cleanliness, up to the middle of March, 1855, to any civil hospital, or to the poorest houses in the worst part of the civil population of any large town that I have seen.

"After the sanitary works undertaken at that date were executed, I know no buildings in the world which I could compare with them in these points, the original defect of construction of course excepted."

With such a statement before us we need not inquire for other causes, though the type of prevailing maladies was doubtless somewhat more favorable to recoveries. Concurrent testimony of all observers in those hospitals positively declares that wherever the sewers and drains were cleaned or trapped, disappeared the chronic diarrhœa and dysentery that until then had not only been endemic in the hospitals, but were almost incurably fatal, seventy-eight per cent. being the death-rate. And the same testimony goes to show, also, that in connexion with such sanitary works and the radical improvement of the ventilation and general administration of the wards, typhoidal sequelæ, ophthalmia, and pyæmia at once disappeared, and that all the pulmonary and diathetic complications of the prevalent diseases were reduced to the minimum. These changes were wrought by the herculean efforts of a few humane and enlightened sanitarians, acting by authority of the Government. The rapidity of these surprising changes more than confirmed all that Miss Nightingale and the Hon. Sidney Herbert had claimed could and should be done by immediate measures and works of sanitary reform in the hospitals on the Bosphorus.

In the grand old hospitals of London, whose gloomy edifices transgress all rules of hygiene, and in the very midst of the dense population of that grim and smoky city, improvements in the rate of mortality, and in the increased air-space, ventilation, drainage, and administration, had gone on together until the death-rate was reduced from 1 to 4, to 1 in 10 or 11 even in Guy's and St. Thomas', while in Paris the improved and airy pavilions of Larriboisière are giving a death-rate less than half that of La Charité, and fifty per cent. less than the unventilated Hôtel Dieu. Such simple historical facts, as well as the plainest teachings of sanitary science, certainly warranted the efforts undertaken by the British Commission in reforming the army hospitals of the Bosphorus.

Are all of our readers aware what vulgar means were employed to bring about such life-saving? The vouchers from masons, plumbers, house-carpenters, and sewer-builders, would give the record of like wonderful improvements in Bellevue and Blockley, in which the death-rate has diminished by the most material and natural agencies from 1 in 5 or 6, to 1 in 10 or 15 of patients treated. But the kaleidoscope of incessant changes in these hospitals has obliterated the deep impression which such improvements should have made. However homely it may sound to fastidious ears, these were the agencies that were mainly instrumental in reducing the rate of mortality in the British Army hospitals in the East:

"The Sanitary Commission took with them such implements and apparatus as they knew would be required in the ventilation and sewerage of hospitals; and among these means were pipe-tubing, drainage-pipe, filters, ten thousand square feet of zinc plates for ventilation, hinges, pulleys, window fixtures, etc. Immediately sanitary works were commenced; first by thorough cleaning, both within and without the hospitals; old sewers were cleaned and flushed, surface filth, refuse, and decaying materials, by thousands of cartloads were removed, and an abundant supply of fresh, pure water, air, and a generous diet were everywhere secured."

Such were the materials shipped at a hurried three-days' notice on the departure of Dr. Sutherland and his two associates in the work of the Commission. How completely in harmony with such preparations are the following records, which we copy from the diary of Mr. Wilson, one of the superintendents of sanitary works there:—

"*March* 24.—Thirteen men, on an average, employed in cleansing the surface of the ground in the vicinity of the Barrack Hospital and at Kalali, in removing the refuse, burying animals, etc. During the week these collected and removed from the vicinity of the Barrack Hospital two hundred and two handcarts full of filth, rubbish, and offensive matter. Two tons of filth were removed at Kalali. The carcases of fifteen dogs and two horses were buried, and the sewers of the Barrack Hospital were flushed.

"*Week ending April* 21.—The ground around the hospitals was cleansed. The filth and refuse removed amounted to four hundred and seventeen carts full. Water was carried to the flushing tanks, and the sewers and privies at the Barrack Hospital were flushed out twenty-four times. Peat charcoal was applied to the privies every day. A dead horse was buried."

Thus, outdoor and indoor, was the hygiene of those hospitals the subject of severest inquisition and the simplest methods of improvement, until the fatal train of zymotic and typhous maladies disappeared, and the rate of mortality fell below that of the best regulated civil hospitals.

The impressive lessons of such an example must not be lost in the eventful progress of the present great struggle of the American nation. Not less than one-sixth of our vast army is to-day in the hospital. And in the course of the ensuing twelve months the aggregate population of the hospitals will have equalled or exceeded the total numerical strength of the forces enlisted. What will be the percentage of mortality in our Military Hospitals? Experience thus far shows that the rate of mortality in general hospitals in different divisions of the forces ranges widely from three to thirty per cent., and that the causes of this wide range of death rates are readily understood.

The average rate of mortality in civil hospitals of New York and Philadelphia ranges from seven to ten per cent. of the total number of patients. Unquestionably even that moderate rate might be considerably reduced by means of further improvements in the external and internal hygiene of those hospitals, and especially if it were practicable to transfer their location to salubrious rural districts. It is not yet known what has been the average death-rate in the military hospitals; but upon the reliable authority of Mr. E. B. Elliot, the able statist and actuary of the United States Sanitary Commission, we know that about six per cent. of the forces in the grand army perished during the nine months ending March 1st, 1862; and that in the soldiers of the western states, the rate of mortality from all causes was between nine and ten per cent. At the same time we know, upon the same high authority, that the death-rate in the best military hospitals of the Potomac army during the last month fell *below three per cent.* of the cases treated.

From what is known, therefore, the conclusion is fully warranted that in some sections of the Army the death-rate in hospitals is vastly greater than in other sections,

and that the causes of such difference are worthy of careful inquiry. At the same time it should be borne in mind that the deaths in military hospitals are usually exceeded by the number of patients who are permanently invalided and discharged; and that the proportion of such persons lost to service bears an important relation to hospital hygiene and the rate of mortality. The following table from Prof. Elliot shows the exact per-centage of deaths, invaliding, and loss in action in the entire Army for nine months:—

THE ANNUAL RATES TO 1000 AVERAGE STRENGTH, FOR THE PERIOD OF NINE MONTHS, FROM JUNE 1, 1861, TO MARCH 1, 1862.

	New England and Middle Group of States.	Western Group of States.	Entire Army East and West.
Deaths	32	96	54
Discharges (for causes other than expiration of service, and mainly for disability)	100	101	100
Of Missing in action not subsequently returning	13	6	14

These statistics are certainly more favorable to the strength of the forces than is popularly believed, but they forcibly present the fact, that in the progress of the war, up to the month of March last, there had been 32,400 deaths, and about 60,000 permanent invalids, to 8,400 soldiers lost and missing in actions with the enemy. How much may be effected by improved hygiene and practice in preventing the annihilation of another hundred regiments in nine months, remains to be demonstrated. By all the appliances or means of improved practice and hospital hygiene, let every medical officer strive to keep down the death-rate, and to prevent invaliding in the army, and thus insure the speedy triumph of the national arms, and give back to peaceful homes the thousands of lives thus gloriously saved.

THE WEEK.

The ingenious tourniquet recently devised by Prof. Charles A. Lee and Dr. Lambert, of Peekskill, N. Y., bids fair not only to become very extensively used in the army, but also to be the means of popularizing the art and habit of self cure after wounds upon the battle-field. This admirable instrument, which was fully described and illustrated in the Medical Times, vol. iv., pages 280–281, has already been officially ordered to be furnished to their troops by the States of Connecticut, Maine, and New Hampshire.

We congratulate both the soldiers and the inventors of this improved tourniquet upon the prospective usefulness of the instrument. Many a bleeding limb will have its life-current saved, and without the usual impediment to the general circulation and muscular motion of such limbs wounded soldiers may march from the battle-field with this simple tourniquet self-applied. It is a timely improvement.

New York never was more honored than when on the 7th inst. her Commissioners of Charity threw open the best wards of Bellevue to the hundreds of disabled soldiers arriving in the Hospital transports of the Sanitary Commission. In the brief period of an hour and a quarter the three hundred and sixty sick and wounded inmates of the "S. R. Spaulding" were transferred from ship to hospital, inspected by the surgeons, and made welcome to the best fare and nursing the city can furnish. The desirableness of hospitals located immediately by the waterside for our returning military patients, could nowhere be more happily illustrated. The Commissioners, on behalf of the city, offer to provide thus for three thousand disabled soldiers.

The sudden death of Dr. J. O. McWilliam, F.R.S., R.N., is noticed in the London Journals. Deeply will his decease be regretted, for he was an earnest, thoughtful, and noble-minded physician.

In his heroic conduct as surgeon of the famous "Niger expedition" his intelligence and fortitude were conspicuous. Returning to England, he was detailed as a special Commissioner to proceed to Boa Vista and the Cape de Verde Islands, to search out the evidence respecting the introduction and spread of Yellow Fever there, by the steamer "Eclair." His searching and faithful report on that subject is full of interest. Continuing his service in the navy, we soon find him successfully striving to elevate the official status and improve the condition of the Naval Surgeon. Finally receiving the appointment of Surgeon to the Customs upon the Thames, a sanitary position of responsibility and honor, he became Secretary of the Epidemiological Society, to whose interests he devoted much attention. As sanitary officer of the Customs on the Thames his labors were important, and his observations valuable. His last contribution, a posthumous paper, read before the Social Science Association, on the High Mortality of the Mercantile Marine, was deemed of such practical importance, that on motion of a noble Lord it was ordered to be brought under the notice of the Government. Dr. McWilliam took a lively interest in our national affairs, and recently, in a private letter to a friend in this city, he urged the observance of an *entente cordiale* between the medical profession North and South.

Reviews.

Malignant Pustule in the United States. By A. N. Bell, M.D., Physician to Brooklyn City Hospital, etc., etc. [*Republished from Transactions of N. Y. State Medical Society.*] Albany: C. Van Benthuysen. 1862.

Dr. Bell's Essay is worthy the attention of our readers. It is one of the most practical papers that has yet appeared upon the subject of which it treats. His thesis is, that "malignant pustule is a specific disease, essentially septic and gangrenous, confined in its beginning to the cutaneous tissue, and generally to those parts of the surface that are habitually uncovered, and caused by animal poison."

Though we conceive that the last proposition of this definition or thesis yet remains undemonstrated, we cannot deny that the evidences are cumulative and harmonious in favor of the theory of an exclusively septic animal infection as the source of this malady in the human race. The author presents the natural history and the pathological phenomena of the malady in a very clear and truthful light, and, with tolerable success, endeavors to prove that the occurrence of this disease in man is always coincident with the prevalence of an epizootic.

The following is an abstract of Dr. Bell's description of the symptoms and phenomena of the pustule:—

"It first appears in the form of a painful swelling, which after a lapse of time varying from one to three days, rarely more, developes upon its central part, a small reddish or purple spot, accompanied with itching. In the course of twelve or fifteen hours more this spot changes into a bleb or vesicle, not usually larger than the head of a pin, containing a reddish brown or a yellowish fluid. Owing to the continued itching, the vesicle is ordinarily ruptured soon after its appearance; if otherwise, it dries up in about thirty-six hours, leaving the exposed derma dry, and generally of a livid color. Itching now ceases; and after a time varying from a few hours to a day, the centre of this discolored and denuded surface begins to grow hard, and becomes surrounded by an inflamed areola covered with numerous small vesicles similar to the vesicle which first appeared. The middle of this areola is depressed, and the color varies from yellow to black. It is now hard in the centre, and more painful than at any other stage. It is, however, a remarkable feature of malignant pustule that severe pain is generally absent; and this character, so different from all other acute inflammations of the skin, is a valuable negative diagnostic of the disease. During the next twenty-four or forty-eight hours the subcutaneous tissue becomes involved; the tumor strikes deeper and rapidly extends, yet it is so indurated as to be easily circumscribed, and its confines determined without difficulty. Meanwhile the central point, now of brown or livid hue, exceedingly hard and intensible, becomes gangrenous. If the disease ceases to make further progress, an inflamed circle of vivid redness now surrounds the gangrenous portion; the tumefaction which had before rapidly extended diminishes, and the patient experiences something like an agreeable warmth accompanied by a pulsatory motion of the affected part. The pulse which had before grown irritable and feeble revives, strength increases; and if there has been some degree of fever, accompanied with nausea, as occasionally happens, it is resolved into a gentle perspiration, and the nausea ceases. Suppuration now sets in between the living and the dead parts of the pustule, and the detachment of the gangrenous portion leaves a suppurating surface of variable extent in different cases. Should the disease on the contrary tend to an unfavorable issue, generally no suppuration takes place; the gangrene spreads rapidly from the centre to the circumference of the tumor; the pulse becomes smaller and more contracted; the patient complains of extreme lassitude with an inability to sleep, is attacked with fainting fits, and becomes passive as to the result: there is disinclination to take food or medicine, or to have anything done, and there is a total loss of appetite; the tongue is dry and brown; the features shrink; the skin is parched; the eyes are glassy; cardialgia and low delirium premonish the fatal termination. * * * *

"Another variety of malignant pustule which commonly attacks the hands or arms, is of less regular character, in some cases presenting au appearance and running a course very similar to circumscribed phlegmon, while in others it is exceedingly violent and fatal in a few hours; and in other cases still, it runs on for several weeks, and finally proves fatal rather from the effects of the disorder than from the disease itself. In the majority of these cases there is intense local pain in the affected part from the commencement, with enormous swelling, and more or less redness. A small vesicle or pustule forms in the centre, and proceeds to take on a gangrenous character. Sometimes it becomes circumscribed, and limits its action to the skin; but at other times numerous phlyctenæ cover the surface, and the destructive inflammation burrows into the cellular tissue which envelopes the muscles, completely surrounding and disintegrating these organs, which sometimes become soft, black, and gangrenous; the blood-vessels and nerves also become involved, and, as a necessary consequence, the death of the part ensues. It is in this second variety of malignant pustule that arise the chief difficulties of a correct *diagnosis*.

"Of all the diseases that man is heir to there is none in which an early diagnosis is more important than in malignant pustule. It is indeed of such moment that the lapse of a few hours or a day may entail the most deplorable consequences. At its first appearance it might be mistaken for the hard, inflamed, and painful swelling sometimes produced by the *bite of certain insects* —hence it has been called *puce maligne*, or malignant flea bite. These bites, however, may always be recognized by the presence of a minute yellowish-colored point in the centre."

Both from the semeiology and the pathological changes that characterize this singular and dangerous disease, it is manifestly allied to the *virus* maladies, if it is not one of the most striking and specific of that class. Certain it is that we do not yet know the precise nature and origin of the specific virus itself, and hence the etiology of the disease remains among the vexed questions of medicine.

Dr. Bell seems to believe that the virus is usually—probably always—conveyed and applied as contagious matter or fomites; and, needlessly, as we think, he would make the alighting of a fly upon the fated nose or lip of the victim, answer for the transportation of the hypothetical poison from 'stump-tail' sores of swill-milk stables or other original sources of the purulent poison, the ready and unsuspected medium for communicating the malady from beasts to man.

The initial origin of virus diseases, and the doubtful question of spontaneity in their development in man, as some claim even for small-pox, will necessarily be mooted until our means of chemical and histological analysis are vastly improved and extended. But our readers will be pleased to see how readily Dr. Bell finds sufficient and never-failing sources for the virus of the *pustule maligne*. He says:—

"In conclusion, it cannot have failed the attentive observer, that malignant pustule in the United States has been concurrent with epizootic disease; and, that so far as the prevalence of epizootic disease is concerned as a necessity for the existence of malignant pustule, both epidemically and sporadically, the conditions seem to be no less applicable to the United States than to France. With *murrain*, it has several times prevailed; and recently in various parts of the northern portion of the United States there appears to be reason sufficient to attribute it to the prevalence of *pleuro-pneumonia* among cattle, which, in some cases at least, according to the evidence before the legislative committee of Massachusetts, resulted in *gangrene of the lungs*—a disease, which, according to M. Dupuy, (*loc. cit.*) was observed to cause malignant pustule in man as long ago as 1821. For the occurrence of malignant pustule in New York and Brooklyn, I ascribe it to the most universally attributable of all causes, malignant carbuncle. For the evidence of the existence of this disease, I only need refer to any of the various reports of sanitary committees for several years past; or, if incredulous in regard to these reports, to the *swill-milk* stables in our midst, which are a disgrace to any civilized community."

The history and intimate pathology of morbid poisons, or *virus* diseases, as they have been denominated by a thoughtful writer, invite fresh observations and the closest study; for the present let all theories be as temporary scaffolding. We believe it will yet be found that the same poison or virus may be originated under various conditions.

Correspondence.

SARRACENIA PURPUREA IN SMALL-POX.

[To the Editor of the American Medical Times.]

Sir:—At a meeting of the Medical Society of Nova Scotia, held at Halifax, on the 3d June, 1862, after reading a communication from Dr. Morris in the American Medical Times upon the "Sarracenia purpurea," it was

Resolved, That the Secretary be directed to communicate to that journal, that after investigating fully the cases upon which Dr. Morris based his opinion in favor of the so-called Indian Remedy for Small-pox, the following Resolution was passed by this Society, at the regular monthly meeting held May 6th, 1861.

Resolved, That this meeting, having listened attentively to the explanations of Dr. Morris, respecting the Indian Remedy for Small-pox (so called), is of the opinion that Dr. Morris has not had any reliable data upon which to ground any opinion in favor of its value as a remedial agent.

I am, sir, your obedient servant,

Chas. J. Gossip, M.D, *Secretary*,
Med. Soc. of Nova Scotia.

Halifax, N. S., June 17, 1862.

Army Medical Intelligence.

HEALTH AND HOSPITALS IN MISSISSIPPI.

[Army Correspondence of the American Medical Times.]

Sir:—In my last letter to you I was in the field acting as Medical Director to the Left Wing of General Pope's command. Since then, I have been acting as Medical Inspector, and have spent most of my time travelling from one hospital to another, closing them up as rapidly as possible, and sending all those patients who would not be fit for duty in four weeks to northern hospitals.

All hospitals established in this section of country, since the battle of Shiloh, are in tents; and as the army advanced from the Tennessee river towards Corinth, division and general hospitals were established in the rear, as necessity required. All these hospitals have been closed, with one exception; that is six miles from here, on the Hamburgh road, and efforts are now being made to close that also. It now has twelve hundred patients, of whom six hundred will probably be sent north, and the balance soon join their regiments. These patients have all been sent away on hospital boats, fitted up expressly for the business, provided with every convenience one can have in a well regulated hospital. As soon as the patients arrive on the boat they are stripped, washed, and clean clothes put on, and generally go to sleep, and make a business of it for twenty-four hours. These boats carry from two to six hundred, and they distribute the sick up the Mississippi river as far up as Davenport, Iowa, and will probably go still higher up that river as the summer advances; also to Cincinnati, and all intermediate points on the Ohio. The class of diseases most prevalent is diarrhœa, remitting fever assuming a typhoid character, perhaps some typhoid fever, typhoid pneumonia, rheumatism, and scurvy. When one sees the number sent away, they might be a little surprised at first and think the whole army a hospital, until made acquainted with the facts and circumstances.

From the very formation of the Army of the West, it became a fighting army; and for the first few months it was very poorly provided with anything, still the men were marched thousands of miles in the heats of summer and colds of winter, half-clothed, without tents, fighting often, guarding bridges and railroads, over malarious streams, and watching constantly. The winter campaign was pursued with as much vigor as the summer, and the weeks of constant exposure to wet, cold, and heat, at the battles of Fort Henry, Donalson, Pea Ridge, New Madrid, No. 10, Pittsburgh Landing or Shiloh, and the protracted approach to this place in consequence of wet weather, and the constant exposure, watching, anxiety, etc., have broken down many men, who will either have to be discharged or sent home to recuperate. The diarrhœa is very debilitating in its effects, but as a disease is not very active, and death seems to follow from protracted exhaustion, and generally not under three weeks. But the most singular of all diseases is a species of land scurvy that is very insidious in its effects, and I think many men are suffering from it, who are being treated for many other diseases. General debility appears to be an important cause of this malady; the men complain they are daily becoming weaker, great muscular weakness, sometimes soreness with red spots, ecchymotic and swollen feet and legs, rheumatic pains, affecting bones, muscles, or any and every portion of the body. Some have pale, waxy, puffy, and anæmic swelling about the face; a few show ulcerated gums and mucous membrane, but they are comparatively few, appetite capricious and bowels irregular, but generally have diarrhœa.

Many of these men show no symptoms by mouth or countenance, and the indications of health are so striking that their names have been stricken from the surgeon's list and put to light duty, and die in an hour. Others complaining of debility walk to the spring, fall down and die. This condition is very deceptive, and so far as I know, or have seen myself, there are no symptoms to indicate the extent of danger. The man complains of lassitude and debility, is walking about, and finally dies very suddenly, or is found dead under a tree, where he has lain down to rest, or in using the chamber dies from the effort. No opportunity has presented itself to me to make a 'post-mortem' of these cases, but from their frequency I am satisfied it can't be from diseases of the heart; and what disease, but scurvy, would allow a man to keep about, and finally cut him off so suddenly?

The Medical Director's office was moved from Pittsburgh Landing to this place, one week ago; but I hope it may not be kept here long, as I conceive the location very unhealthy from excessive heat, scarcity of water, and a great amount of animal decomposition. This whole region has been one vast camping ground for three hundred thousand men for weeks and months, and the mortality among men and animals, with camp garbage, renders the atmosphere anything but the purest and most healthy.

We labor at present under great difficulty in not being able to supply the sick with butter, eggs, milk, chickens, etc. They are not in the country to be purchased at any price; the railroad communication is not fully established, so as to procure these articles north, and ship down. I fear our sick list will not diminish, as it seems to be the policy of our generals to keep the army on the move; and long forced marches at this season of the year are not very conducive to health in this climate. The army of the West ought to rest for the summer and recuperate, and by October would be ready to complete what "*General Summer*" has not done for our enemies. Respectfully yours,

Charles H. Rawson,
Brig-Surg. and Acting Medical Inspector.

Corinth, Miss., *June* 21, 1862.

Medical News.

Health of Liverpool.—The Returns of the Registrar-General for the year 1861 showed a somewhat less favourable state of the public health throughout England than in 1860, and Liverpool contributed its full share to the increased mortality. The death-rate of the borough during the two preceding years was—according to the Medical Officer of Health—unprecedentedly low, and, as is frequently the case after a long period of great healthiness, it underwent an augmentation during the last year. Nevertheless, it did not rise above the average of the previous five years, and was much beneath the average of the years preceding 1856. The deaths registered during the fifty-two weeks were 12,933, being 1697 more than in the previous year, and about 600 less than the average of the preceding ten years, corrected for increase of population. In the parish the deaths were 8680, and in the out-towns 4253; giving for the former a death-rate of 31·9, for the latter of 24·3, and for the borough of 28·8 per 1000. This mortality is about equal to the average of the preceding five years; but as compared with the mean of the ten years, 1851–1860, there will be found a saving of about 600 lives, and as compared with that of the ten years preceding the Sanitary Act, the Returns show that, high as the mortality was, not less than 1650 lives were saved last year in Liverpool. —*Lancet.*

We understand that Miss Garret's application to be admitted to examination by the Edinburgh College of Physicians has been rejected by a majority of two. At the London University, where this lady made similar application, she was more fortunate; for on that occasion the voting authority was equally divided on the case, and decided against her by the chairman.—*British Medical Journal.*

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE

NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL IN THE PRELIMINARY COURSE.

SESSION 1860-61.

BY A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

LECTURE X.—PART III.

Dental Fever.—Fever Theories, and their Bearing upon Dental Fever.—Severe Fevers never Dental.

THERE are, gentlemen, two systems of the infantile organism, of which I have not yet spoken to you in regard to their connexion with dentition. These are the circulatory and the nervous systems. They are subject to a large number of aberrations of their functions during the time when teeth make their appearance. As, however, the morbid symptoms observed in the nervous system, particularly convulsions and paralysis, require a thorough and explicit investigation of their own, I now, at the conclusion of this lecture, shall be satisfied with making a few remarks on an anomaly of the circulatory system, very common at the period of life and development which forms the subject of these lectures. I speak of fever, which in the period of dentition, as in other ages, is characterized by ill feeling, chills, thirst, dryness of skin, frequent action of the heart, and increased temperature.

Some of the prominent symptoms by which we diagnosticate fever, belong directly to and depend upon the circulatory system. Therefore, I prefer speaking of it as a separate subject, although the proper place would have been among the affections connected with anomalies of the nervous system. For, whatever causes may be brought forward as giving rise to fevers of any sort, it is true that to obtain a real explanation of its nature in general, and the fever of dentition in particular, we have to look for the nervous system to give it. The first reason for this assertion is the fact that every one of the fever theories of our pathologists falls back on the nervous system; and the second, that there is scarcely any possibility of explaining the fever of dentition, which is said to be such a very common occurrence, except by taking in regard some affection of the dental ramifications of the fifth pair.

How can any affection of the dental nerves result in fever?

A few remarks on the nature and causes of fever in general will explain to you the modus of this process.

There are two principal symptoms constituting the essential features of fever, viz. increased temperature, and increased loss of substance; both prove the acceleration of the transformation of substance. The increase of temperature is particularly worthy of notice; for the utmost physical exertion, under physiological circumstances, will scarcely ever augment the temperature of the body by more than a single degree. Nor is always a dissolution of the blood, a poisoning of the blood as it were, necessary to explain the height of temperature, for there are a large number of fevers in infants and children, of very short duration, and without any serious consequences, and nevertheless attended with an increase by four or five degrees, which by no means depend on poisoning of the blood, nor on important inflammatory processes. These latter especially, with all the increased combustion during their course, show more fever, and higher temperature, before their complete development, than while the inflammation as such has been diagnosticated. The first assault of an inflammatory disease is generally the period of the highest fever and temperature.

Which, now, is the cause why, under all circumstances, combustion is kept down on a certain average, and chemical decomposition of the tissue into more simple combinations does not take place? And which again are the causes of such disturbance as constitute the nature of fever, with its increased combustion and disorganization?

Physiological researches have shown that the order and regularity of the functions of many systems depend on the normal action of certain portions of the nervous system. Cut the pneumogastric nerve, and the action of the heart is accelerated until paralysis takes place; the splanchnic nerve commands in a similar manner the abdominal viscera, the sympathetic nerve the action of the salivary glands; the cerebellum dominates voluntary motions, and disturbances in its composition or function render them irregular; consciousness and thinking are rendered flighty, irregular, impossible, by more or less severe interference with the substance of the large hemispheres. Now, in a similar manner as the action of the heart, the salivary glands, the abdominal viscera have a regulating power in the normal action of certain nerves, the normal transformation of matter and combustion are thought to depend on a nervous centre, which when interfered with, and losing its regulating power, or paralysed, will give rise to the symptoms of fever. Such at least is the theory of Traube, Virchow, and Bernard, that all the vehement symptoms of fevers are the result of nervous paralysis, the only active condition (that is, irritation) being shown in the chill, the reaction, however, being the result of weakness or exhaustion of the vasomotory nerves of the whole surface of the body. By this theory we obtain an explanation of the rapid rise and disappearance of fever, and its liability to unexpected and rapid returns; further, of the considerable increase of temperature shortly before (even after) death in many diseases; and, although the rhythmical and cyclical nature of fever in general is not fully explained by it, we reach some clue to our explanation in the rhythmical and cyclical nature of many physiological and pathological processes depending on the nervous system, as for instance, sleep, many cases of neuralgia, and epilepsy.

Thus, the nature of fever would consist in the exhaustion or paralysis of the vasomotory nerves. How will this exhaustion be brought on, and in which connexion have we to assume an irritation of the dental nerves of teething children, with such an exhaustion of vasomotory nerves? Scarcely any other condition besides irritation, can be imagined to exist in those nerves, during the increased afflux of blood to the gums and jaws, and the slight hyperæmia and pressure of the nerve depending thereon. And certainly, we are not disposed to think that the immediate result of irritation of the dental nerves could be reflected to other nerves, directly and immediately, as paralysis. We are more prone to assume that if there is a connexion between the dental and the vasomotory nerves, the irritation of the former will be reflected as irritation in the latter. But then, to produce fever, you need, according to the above stated theory on fever, not irritation, but exhaustion and paralysis. I know you will tell me, that I have stated myself, that the above theory assumes a state of irritation on the first day of fever, the chill—and will perhaps conclude that this initiatory irritation, or active condition of the vasomotory nerves, is followed, as its immediate effect, by exhaustion and paralysis. And thus, there would be no link missing in our argumentation. But there is a strong argument against this explanation. It is this, that there is a vast difference between the principal symptoms of fever in adults, and in infants and children. There is very little, or no chill, in the fever of infants, and while, for instance, cyanosis is a very common occurrence, and vomiting is not an unfrequent symptom in the most trivial fevers of children, those above mentioned principal constituents of fever, chill and reaction, are generally not observed to alternate so regularly in infants as they do in adults. Thus, the stage of irritation of the vasomotory nerves, which would have to be followed by exhaustion, and which would constitute

the next and immediate result of reflex action transmitted to the vasomotory nerves from the dental ones, does not exist at all, at least not in the vast majority of infantile fevers of any description.

Now, Professor Schiff, of Switzerland, has lately brought forward, supported by both experiments and observations, a new theory on fever, which appears to greatly facilitate the explanation of our subject. He takes the chill and the heat in fever to be entirely independent from each other. The heat, which has been taken as "reaction" before, he considers as the only constant and indispensable symptom of fever. He has further discovered in the vasomotory nerves, both contracting and dilating fibres. Therefore, where in cutting the vasomotory nerve entire, the dilating fibres are paralysed, there is no congestion; where there is irritation of the dilating fibres there is congestion, even local cyanosis; therefore, not only the chill in fever, but also the stage of heat, formerly called reaction, are active conditions; the chill depending on the action of the contracting, the heat on that of the dilating fibres of the vasomotory nerves. Thus we approach an explanation of the fact, first, why it is possible that chill can be absent, as a rule, from the fever of infants and children, although they participate in all the other symptoms of fever of adults; secondly, that the irritation of the dental nerves may be reflected, as such, to distant nerves, and produce the symptoms of fever, without chill, by active dilatation of certain fibres of the vasomotory nerve. Thus you have another instance, where physiology has to come to the rescue in the solution of difficult pathological questions, and a proof that wherever there is an uncommon degree of hyperæmia of the gums and jaws, and consecutive irritation of the corresponding nerve, the popular belief of fever depending on the development, or rather protrusion, of teeth, is founded on some physiological truth.

But at all events you must never forget that the range of health is wider than is sometimes assumed. Tissue generally, and bloodvessels especially, bear a certain amount of injection without exhibiting any symptoms of feverish reaction, or other diseased function. Thus you would be greatly mistaken if you took the occurrence of fever during the protrusion of a tooth to be a necessary symptom. A physiological process does not include, from necessity, a pathological consequence. Thus you have to be careful in judging of a case of fever in a teething infant. If there is a difficulty in diagnosticating pathological conditions of the infantile organism, it consists in the explanation and localization of fevers. For almost every fever in infantile life will yield a local cause to an attentive observer; even such fevers as are frequently not shown by anomalies in internal organs, in adults, catarrhal fevers for instance, will be attended in children with decided symptoms of catarrhal nature on some one of the mucous membranes, and recognised as such. I always return to my old assertion, that the diagnosis of infantile diseases is by no means more difficult than of those of adult life; but care and attention, and close observation and accurate knowledge are required.

Even if the fever of a teething child is to be taken as dental fever, in a given case, it must be considered as corresponding with the amount of irritation of the dental nerve. If this is abnormous, there is no longer a physiological process, but a disease which must be diagnosticated and attended to. Severe fevers during teething ought never, never to be taken as simple symptomatic fevers, but their cause sought for. You know, however, from a former lecture, that diseases of the gums and jaws are rare occurrences. Thus you will have to look among the whole number of such diseases, as I had the opportunity of describing to you in these lectures, or others hitherto not mentioned, for an explanation of the untoward symptom. Again I say, where there is a high fever do not put it down as dental; mild cases, moreover, will seldom be brought to you for advice; and thus, you will seldom be called upon to make the diagnosis of dental fever. I have made the diagnosis of difficult dentition and dental fever once in the last three years. The infant suffered from a severe fever without apparent either local or constitutional causes; two days after my diagnosis the infant had variola. Since that time I have mostly left the diagnosis of dental fever and difficult dentition to mothers, and have made one of my own.

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from page 32.*)

THERE is a question which I hope we shall one day be able to decide, viz. whether the transparent or hyaline casts are always indicative of Bright's disease, or whether they may occur and the person voiding them be exempt from the danger of kidney disease. I very much fear that we shall not be able to take a very favorable view of this subject. I am not yet prepared, however, to appreciate their value when no other signs are present. With reference to the other forms, the blood casts alone excepted, I believe they are almost diagnostic; highly granular casts, or fatty casts, I believe, are always indicative of Bright's disease of the kidney, in either the acute or chronic form.

There are conditions in which albuminuria is temporary; still, these conditions we are compelled to call Bright's disease. I refer to the uræmia of scarlet fever, and to that which occurs during and after pregnancy. Here we have Bright's disease without a question, one of the forms often cured, and in this view one of the sunlights that we are allowed to contemplate as shining in upon the subject of treatment.

It is worthy of notice in this connexion, that very often in the beginning of Bright's disease, whatever form the symptoms may assume, if we except the small kidney, the urine is sometimes found *bloody* and sometimes of a *smoky hue*. The smoky urine is equivalent to the bloody urine, for when the matter that has produced the dark color is collected in a sediment, it is found to be blood in a condition not altogether unlike that which is observed from the stomach of persons who with yellow fever have had black vomit. The blood is in some degree disintegrated, a portion is granular matter, and a portion blood corpuscles. The granular matter is of a brown color under the microscope, and I suppose is derived from the hematine of the blood converted into a substance known as hematoidine. It is only under certain circumstances that blood will undergo this change; in yellow fever, effused into the stomach, it meets with some animal substance; it cannot be gastric juice, as it undergoes the same change where that secretion does not exist. This animal substance, whatever it is, converts the coloring matter of blood into this hematoidine—which is generally of a brown color, sometimes black, and in the liver it is sometimes capable of undergoing a very beautiful transformation into eight-sided crystals as beautiful as the ruby. In the urine it does not form into crystals, but often into scales laden with granular matter, and slightly conchoidal in form. Sometimes, when not laden with granular matter, these scales are crescentic. This then is the only difference between bloody and smoky urine, that the blood has met with some extractive matter which has converted its hematine into hematoidine, almost always of the brown granular variety, and the same agent often causes shrivelling and other changes in the appearance of the corpuscles. The significance of smoky urine is the same as that of the bloody urine, so far as the condition of the kidneys is concerned, both implying a congested state.

In some of those whose blood is loaded with urea a *urinous odor* is noticed in the secretions of the skin, espe-

cially in those of the armpits. I have heard Dr. Jos. M. Smith say that this odor was very distinct in the person of a distinguished menber of our profession whose lamented death was caused by the disease we are considering. In him, however, it was supposed to arise from abscess in the axilla. It may be that this urinous odor from the surface occurs even when the urine gives no evidence of kidney disease. I have lately seen a child in the practice of Dr. Crane, of this city, in whose urine we could not find either albumen or casts, but whose perspiration was clearly urinous. This child had the complexion and the œdema of Bright's disease, and died after a long scene of convulsions. The urine varied much in its condition, one specimen being pale as water, sp. gr. 1008, another of high color, sp. gr. 1022. A post-mortem examination was not obtained. This odor is often very marked in those who have suppression from acute renal disease. There we have uræmia as we have here, but occurring in a different way. Still we have the peculiar odor in the one, and we should not be surprised to find it in the other.

This ends the catalogue of symptoms that I had noted to remark on. As a catalogue it is not complete, but it embraces all that it seemed to me worth while to occupy the attention of the Academy with. We will now turn to some other branches of the subject.

The age at which this disease occurs is worthy of remark. Independent of its connexion with scarlet fever and diseases of the heart, I think it rather a rare affection in childhood. It is common enough in connexion with these two conditions, but independent of them; occurring as it does in man from causes not readily appreciated, it appears to me to be rather uncommon. It is not very common in advanced life, but belongs rather to the period that may be called the middle age. It occurs pretty early in manhood, many cases are remarked as early as fifteen or sixteen, and it can be traced as far on as sixty or seventy, but the cases diminish rapidly after forty-five or fifty, and comparatively few occur until about twenty. I shall soon give some statistics by which this statement will be illustrated.

Sex.—It appears to occur far more frequently in men than women. In making a comparison between the two, I should say nearly two males for one female, and perhaps this may find an explanation in the causes, so far as we understand them, which are capable of producing the disease.

The relations of this affection are interesting:—We have found it almost everywhere: It is difficult to anticipate a particular case in which it may not occur, as for example, this very day I have found albumen and casts in the urine of a lady who seemed to have no disease but dyspepsia. She remarked it as a matter to which she was quite indifferent, that there was a little swelling of the feet, and I found by pressure with the finger that I was able to make a little indentation. She has been treated for three years past for "liver-complaint" and dyspepsia. I suppose that her liver is sound enough, but her stomach is not. She has that distressing sensation across the epigastrium to which I have already referred—a sensation which cannot be satisfactorily described, a certain feeling of emptiness, and still of aching.

It is to be found, I believe, not very unfrequently associated with chronic diarrhœa. A certain proportion of cases of chronic diarrhœa have terminated with œdematous effusion into the areolar tissue, and the examination of the urine has disclosed evidences of Bright's disease. I do not know but this may be accounted for by the circumstance cited the other evening before the Pathological Society, that where disease affects for a length of time, or very actively for a short time, organs supplied with innervation by the great plexus of the abdominal cavity, though the disease may spend its greatest force upon other extremities of that system, still there seems to be a general sympathy between such parts or organs and the kidneys.

It is only very lately that I have seen a very distressing case of chronic diarrhœa, attended near its close by œdema of the whole body, and this followed by convulsions to the number of twenty-two in sixteen hours. From this condition the lady passed into insensibility, continued to breathe for a period of three days, and then died. The urine in this case was albuminous, but there were no casts in the sediment. On post-mortem examination the kidneys were found to be well advanced in granular degeneration. Such cases, I suppose, will be found much more frequently than we are aware, if we only make the proper search for them.

It is lately also that I have seen a pretty extensive and firm adhesion of the pelvic viscera to the bones of the pelvis. The lady had had peritonitis on two occasions before, and had been cured by the opiate plan of treatment. In this condition she applied to a physician who devotes his attention to uterine dieases, in the hope of being relieved, when it was discovered that Bright's disease existed. The treatment for the uterine disorder was given over, and she returned home, and died two months from that time. It would be unfair in this instance to claim that the affection of the kidneys was secondary to the disorder which preceded it, if the case stood alone; but the instances in which kindred affections have been followed by Bright's disease have been sufficiently numerous to warrant grave inquiry into their relations.

It is very well known that a considerable number of those suffering from consumption have Bright's kidney. Here we are going beyond the range of the solar plexus, but we are not beyond the reach of the ganglionic system. As is very well known, the par vagum establishes a close connexion between the ganglionic system of the lungs, and the abdomen. Many patients who die of phthisis, have œdema of the feet some time before death. It has been our custom in Bellevue to have the urine of such patients examined, and it has surprised me to learn in what a large proportion albumen exists, and in what a proportion casts are also present. Indeed we may pass beyond the spheres of the solar plexus and of the par vagum also, and say that this affection of the kidneys obtrudes itself too frequently in all diseases characterized by exhaustion and debility.

In connexion with the same subject, though not exactly apposite to it, is the occurrence of acute diseases of the kidney of a somewhat analogous character in two of the most formidable affections with which human nature is afflicted, viz. yellow fever and cholera. In the progress of yellow fever, in a considerable number of cases, the urine is suppressed or very scanty, and in almost every instance (this subject has been carefully studied by Blair, of Demarara) albumen is found in the urine when the fluid can be obtained. This albuminous urine, or rather the uræmia accompanying it, seems to be, at a later period, one of the causes of the reaction; precisely the same thing can be said of cholera. There, too, the urine is albuminous, and it continues so during the reaction; and uræmia is, I have no manner of doubt, the chief cause of those cerebral symptoms with which many die. I suppose it has been the fortune of many a physician who has had charge of cholera patients to have heard that the friends charged the death to the immediate effect of the opium used. I believe that in the majority of instances it is not the opium, but the urea, that drowns out the energies of the brain. Here we see, I think, the sympathetic relations of the ganglionic systems. In both these diseases the intestines are very much involved in diseased action. In yellow fever the intestines produce the black exudation as well as the stomach, and are in the same manner diseased. Cholera seems to spend its force first upon the primæ viæ, and then the function of the kidneys is perverted.

Relating to diabetes, I have some remarks to make in connexion with this subject that are perhaps new. I have nowhere seen it remarked that diabetes ever terminates by albuminuria and uræmia, and yet in the present year it has been my fortune to meet with two such cases. I cannot say passed into Bright's disease, for the diabetes in either

case did not appear. One of these cases has been published with the *Transactions of the N. Y. Pathological Society* in the *American Medical Times*. It occurred in the practice of Dr. Linsly. A child had diabetes for about a year, when, rather suddenly, a change was noticed in her symptoms. She became feverish, restless, uneasy, slept badly, the urine had lost its straw color, and as the mother said, was disposed to bear the bead. We examined the urine, and found it albuminous, though this was not until three weeks after the mother had noticed these changes. She was then seized with a very distressing pain in the side, so that Dr. Linsly suspected pleurisy, but we examined the chest, and did not find it. This pain was excruciating for a time, but it gradually yielded to fomentation and other applications, and then gradually the child became drowsy, and passed away in that condition. A post-mortem examination was allowed by the parents, and we found the kidneys granular.

(*To be Continued.*)

THE PRESENT

STATUS OF PSYCHOLOGICAL MEDICINE.

By I. PARIGOT, M.D.,

LATE COMMISSIONER IN LUNACY AND SUPERINTENDENT OF GHEEL, BELGIUM. PROPRIETOR OF A PRIVATE INSTITUTION AT HASTINGS ON THE HUDSON, NEW YORK.

No. V.—The Wyndham Affair.

This extraordinary trial will, it appears, have a great influence on the status of psychiatry *in England;* we say purposely in England only, because no other European state follows her legal proceedings, the anomalous remnant of other ages, and because here in America though the same principles are unhappily admitted in lawsuits and petitions, transient influences, such as that of the Wyndham affair, will have no effect on our courts.

Very few physicians may have had occasion, or time, to read a trial concerning the sanity or insanity of a sensual, mal-educated, depraved, and degraded imbecile called Wyndham, heir to a large fortune, and the descendant of an illustrious family. The proceedings of the commission *de lunatico inquirendo*, concerning that gentleman, are only to be found here some weeks back, in the *Police Gazette*, under the title of an "*Attempt to get Possession of the Estate of an alleged Lunatic, forming a Laughable and Unique Tale of Aristocratic Life in England;*" and the *Gazette* might well have added, *in every country* where *wealth drives man to immorality.*

William Fred. Wyndham is a young man, about twenty years of age, in a physiological point of view, the miserable offspring of two persons that ought never to have been united, if the slightest attention had been paid to moral and physical dispositions of the parties; but in some families, respecting marriage, one or two questions supersede all others; rank and money make up for any natural defect, or even destroy any antagonism that may exist between the parties to be united. The consequences of our customs on this point are patent, namely, imbecility, idiocy, scrofula, and barrenness. Thus, irrational marriages have annihilated the most renowned families of Europe; no great historical name has actually its representatives, and sometimes the descendants of valorous knights are malformed, scrofulous, dwarfs, or some idiot, to whom his servant in feeding his lordship performs an act of charity! However, this evil is but small when compared with the public and private misfortunes arising from such a state of things, for time will show, and it will be found that public interest requires, that *morality* and *physiology* should be the principal rules for matching people, not only in view of their private happiness, but also to forward the public interest, by preparing the source of a strong, healthy, and moral generation.

We see in the disclosures of this trial, that the mother of Wyndham was a very nervous and excitable person, and that her husband, also quick-tempered and passionate, was fond of the pleasures of the table; besides, that one of the uncles of William had been subject to *delirium tremens*, etc., etc. Now, this young gentleman, after a bad education at home, where his parents allowed him to act *as a servant*, and with very little learning that could have supplied an original mental deficiency, was brought by all sort of excesses to a state of imbecility that closed every moral sense. After an outrageous public conduct, not denied by his counsel, he married a sort of prostitute, being himself contaminated by a venereal disease, and with the help of some swindler, squandered his fortune in such a way, that having been left with about 9,000 pounds income by his father, so many hundreds only will hardly remain for his lifetime. But all these miseries have no interest whatever for us; the scientific questions connected with this scandalous trial only interest the student of psychology, and they originated in this way. The family brought an action against William Frederick Wyndham in order to secure the property, and have him, perhaps, kept as an inmate of some lunatic asylum. As late commissioner in lunacy we have seen enough of these legal cruelties, to understand that the threat, or even the apprehension of a perpetual prison, would naturally create a great excitement among the public and the jury, and that under its emotions and oratorials the real state of the question is often entirely overlooked. The only good argument in the speech of Sir Hugh Cairn, in favor of Wyndham, and against the petitioners, is the following; all the rest of the speech, its arts and eloquence to explain and whitewash *the facts* of the most revolting immorality, which in this case are mere symptoms of imbecility, are sufficient to convince any expert of the real state of mind of W. Wyndham. Now, the argument we approve of is this:—"If the members of the family were sincerely and fairly desirous of taking the opinion of a jury upon the mental state of their relative, there was an easy and simple way of doing it; they would have said: we are of opinion that the state of mind of our relative is such that he cannot be intrusted with the management of himself or his affairs; our medical witnesses say that his sanity or insanity can be tested by an examination; will you be kind enough to see that those tests are applied to the mind of our relative not for the purpose of showing unsoundness, but for the purpose of fairly ascertaining whether his mind is sound or unsound." Now this course was not adopted by the family, but they brought forward a mass of evidence of the most disagreeable, not to say disgusting character. Now, either during the fifteen or seventeen years of the life of their relative, over which this inquiry extended, they were in the habit of seeing him and observing his despicable course of life, or else they were not, and never saw him. In one case, why decline to support their petition by their evidence in open court? In the other, is it not curious to ascertain that the family neglected to inform themselves about him *until* a time came when they thought the property was in jeopardy?

Relating to medical witnesses, it is easy to understand that from a want and positive deficiency of proper management and fixed rules among them, especially the experts in insanity, Wyndham and his counsel could find some physicians barefaced enough to declare that imbecile a perfectly rational being. In consequence of which the verdict of the jury was that Mr. Wyndham is of *sound mind* and capable of *taking care* of himself and of his affairs. A worse verdict than this morality and civilization could not expect from any jury. The most Honorable Lord Chancellor of England has perhaps felt hurt after such a curious decision, and his anger has fallen on the medical profession; at all events, he might certainly have been astonished at the great discrepancy of the medical evidence during an inquest, which lasted thirty-five days, and involved large sums of money. The antagonism of law and medicine is a known fact; his lordship declared that law must henceforth regard insanity as a fact to be proved by ordinary evidence, and not as a disease to be determined by experts! Not satis-

fied with that, he has introduced a bill concerning lunatics possessing property (which is under his care), by which every alleged lunatic is to appear *first* before the court (consisting exclusively of unprofessional persons), and only thereafter, provided doubt should exist in their minds, be examined by medical men. It is really remarkable that the same spirit of darkness that inspired these resolutions is the same we declared in a memoir read before the Academy of Medicine of New York last year, in which paper on moral insanity, pages 6 and 7, I proclaimed the pretensions of some courts that there should exist a *legal insanity* to be determined as such, without or against the opinions of physicians!

We leave the responsibility of such propositions to rest on the shoulders of the learned Chancellor of England, only remarking that he wishes for an impossibility. During the last sixty years psychology has made such progress, that his lordship's proposal is absolutely contrary to good sense and the simplest observation. Experts, at least honorable experts, will remain the unique judges in all medico-legal questions concerning insanity, for this simple reason, that nobody can better know insanity in its various forms than physicians who are constantly with them, and that none but physicians are able to distinguish mental and corporeal troubles and diseases. But we are ready to admit the necessity of some regulations concerning experts; we declare it is a shame to see experts contradicting each other pompously before the courts; experts ought only to be designated by courts, and not called by the contending parties, whose views they are paid to support. Experts should be ordered to investigate thoroughly the case, and make jointly a written report, state their doubts, if any, and answer in the box all questions the counsel may put to them. Doctor Coventry, of Utica, in an excellent paper on the jurisprudence of insanity, says that "the present system of permitting both parties to summon as many witnesses, and whom they please, is not only oppressive to the witnesses, but wastes the time of the court, prolongs the trial, and serves no useful purpose; it is not unfrequent that the ingenuity of the counsel on the respective sides is more engaged in picking flaws in the testimony of the adversaries' witnesses than in elucidating the truth and justice of the case; the jury, instead of being enlightened, is only confused by the conflicting testimony of the witnesses."

What a poor logician is the actual Lord Chancellor of England! Because some medical gentlemen have been prevailed upon to maintain false doctrines, therefore all medical testimony must be done away with, even that opinion which shall be the expression of truth! We cannot believe that such proposition will be accepted by Parliament, and even by the other members of the English government. Really we fear that the name of *mad-doctors*, so terribly applied to physicians, might be returned to the learned lord of the woolsack, and changed into *mad-chancellor*.

Examining now the facts clearly proved in the Wyndham trial, and comparing them with those mentioned in the best writers, we see that simpletons, imbeciles, and idiots are not confined to the disgraceful beings we find in asylums; sometimes their countenance and figure are predisposing in their favor; some females may even be said to be pretty, at least during a certain period; sometimes also they mix in society, and only the eye of the practical physician is able to detect them; do we not see some idiots endowed with eminent faculties and able to conceal their propensities and low morals? Authors on mental pathology abound with facts relating to the natural dispositions of idiots and imbeciles; the history of Wyndham is written twenty times over in their records; and the means of ascertaining, and certifying such cases are known—*physiological* and *moral symptoms* are to be described; and we cannot understand that simple conversations, even during many hours employed in giving some bad excuse or ridiculous explanation of disgusting acts, can permit any scrupulous physician to certify the sanity of an alleged imbecile. In similar cases we had occasion (in some affidavits now before the Chancellor of England), to describe the pathognomic signs of imbecility, though the subject was, as much as I can remember, much less immoral than Wyndham's. Besides, Dr. Trélat in his last publication, *La Folie Lucide*, describes a quantity of cases of imbeciles, at the same time satyrs, nymphomaniacs, squanderers, and dissolute, who had been the shame and disgrace of their families; that eminent physician considers such subjects as unfit for society, and at least to be put under the control and protection of special laws.

THE LESSONS IN THE SURGERY OF THE WAR.

By RUFUS KING BROWNE, M.D.,

BRIGADE SURGEON U. S. ARMY, AND CHIEF MEDICAL OFFICER AT NORFOLK, VA.

About five hundred of those wounded at the battle of "Fair Oaks," who reached Fortress Monroe on transports, were examined by me, and I propose to mention some of the incidents during my attendance on them while at the Naval Hospital, which particularly engaged my attention. A large proportion of these, I think a majority, were wounds in the lower part of the body, showing that their enemies had practised the lesson "fire low." The wounds of a considerable proportion, which had lain some hours upon the field, had become a *nisus* for the larvæ of flies, and were occupied by myriads of these at various stages of development, and this was the same where the raw surface was of any greater extent than that pertaining to orifice of entrance or exit, whether it had been made by a missile or by the surgeon's knife in amputation. Nearly all the amputated cases were at the thigh, and were primary operations which had been very creditably done. Of the five —four of which were primary—which I particularly noted and cared for, three did well and are still doing so. One of the other two had secondary hæmorrhage, when the femoral was ligated on the eleventh day (so near as I could ascertain) after the amputation, and died the fourteenth day; the other, amputated by myself on the ninth day after the receipt of the wound (a compound and a comminuted fracture of the femur, extending to the knee-joint), died on the sixth subsequent day, without the supervention of secondary hæmorrhage. I had hoped better, though he was of poorly nourished body and comparatively infirm constitution. Of the three which are doing well, one had secondary hæmorrhage which required ligation of the femoral.

There was one case of amputation of the leg, which confirmed me in my previous view, that where the comminution of the bones of the leg forbids the attempt to save, and requires amputation above the lower third, it had better, as a rule, be done at the knee-joint, and include a thin slice of the femur. In this case, the operation (primary) had been done just below the line of the upper and middle thirds. The thin layer of soft tissue corresponding to the anterior flap, had retracted so far as to bring its apex very nearly into a line with its original base, leaving the end of the protruding bone six or eight lines beyond it. In this case, when it became apparent that the bone must be shortened and covered by the formation of a new flap, I proposed re-amputation at the knee-joint, but by the advice of the surgeon in charge, I operated about two and a half inches above the first. The tissues were found to be morbidly vascular, and though the cut surfaces were not brought together until two hours after, when all oozing had ceased, on the fifth day ligation of the femoral was performed, and on the fourth subsequent day the patient died. All these cases were flap operations, as were those I did myself, and all but the latter were infected with maggots. I found no means of removing these except a move at a time by the forceps. Various solutions were tried for the purpose—dilute sol. nitric acid, etc., but were all wholly ineffectual. It occurred to me that quassia, the only bitter tonic which destroys the fly, might destroy the larvæ or disperse them

when developed, but I could not obtain this article. Remarkably great in all these amputated cases was the amount of suppuration. In one the drainage of two days amounted to half a pint. This, of course, as compared with injury, which consisted merely of the canal formed by the track of the ball. In these latter it constantly seemed to me that there was a very decided difference in the amount of suppuration, whether the wound ran nearly transversely, or nearly longitudinally to the course of the muscles and aponeuroses—there being most in the latter case. But I noticed but little difference in this respect where the wounds respectively involved comminution of the bone.

In none of these amputated cases had the flaps been kept in apposition by union, though in a large number of cases attended to, including the preceding five, some were progressed in granulation. [I was induced to think that the transportation to a distance from the place of wounding, of amputated cases, or capital cases of the extremities, particularly if such transportation consist in more than one change of conveyance, was not the best surgically. The contrary is undoubtedly the case with sick, or perhaps slightly wounded or injured men. But this opinion is not due to the increased danger during carriage of recurrent hæmorrhage, for this I think unsustained.]

In the dressing of these cases I felt that some simple means should be devised for lifting upwards the under flap, which constantly tends to weigh away from the upper. All that is required in the case has hitherto been thought to be fully accomplished by the supporting roller about the base of the flaps. But this only keeps the cut surfaces closely pressed. But with this, if the under flap be heavy, it will weigh downwards and backwards, together with the upper which is kept fast to it, so far frequently as plainly to show beneath the latter the whole contour of the cut end of the femur. This lifting may be done by passing adhesive straps from a point behind the base of the flaps, and bringing them forward in one strand to hang upon some elevation at the foot of the bed. The stump up to the point at the base of the flaps where the bevelled form commences, rests upon its opposite cushion. These will, moreover, serve to gently raise the stump from the bed at the time of dressing, avoiding handling, one of the most important of all purposes to the surgeon, and by it also the cushion may be adjusted with the most comfortable nicety.

I am inclined to think that it is preferable to make the posterior stump thinner—not shorter—than usual. The great mass usually left in the lower flap, when pressed up to admit the sutures, forms rounded prominences, not favorable to the object of bringing the surfaces in apposition.

Whoever attended to these wounds with a reflective mind, could not fail to be struck with the consideration that the prevention or arrest of suppuration or a reduction to some attainable minimum, was the paramount consummation. It is not the *amount of pus discharged*, which is so contrary to all the physiological conditions of healthy tissue in the patient, for this only indicates the extent of the original morbid irritation which inaugurates the action of the tissues in the suppurative process. This suppuration consists in the enormously rapid multiplication of cells, which immediately and in virtue of the very same conditions which produced them, break down, or as we term it "liquefy."

To reduce or destroy this irritation—to the point where cell multiplication does not exceed normal "granulation"—is the desideratum. *Disinfectants* do not contribute to this end, though they do subserve equally important objects.

The medication in all the preceding cases was done in accordance with my idea of supporting or protecting the *nervous system*—a different thing in my estimation from either supporting or stimulating, i.e. *nourishing* the body. It consisted of quinine and morp. combined, with mild tonics. Where the pain of the cut or lacerated surface was excessive, the latter or pulvis opii was gently scattered upon it with immediate relief. Under the circumstances of such wounds, I am confident that the *assimilation* of however nutritious substances, is nearly or quite precluded by the physiological conditions, and hence nutritious diet is of little avail.

Reports of Hospitals.

MILL CREEK HOSPITAL.

SERVICE OF JOHN W. HUNT, M.D.

[Reported by E. Lester, Med. Cadet, U. S. A. July 8th, 1862.]

Case I.—*Compound Fracture of Humerus.—Gunshot.*—H. Eller, Co. K, 5th N. C., twenty-one years of age, in good health, of temperate habits. While engaged in the battle of Fair Oaks, Sunday, May 31st, received a shot from a musket, the ball entering the anterior and upper third of the arm, and making its exit nearly opposite, fracturing the humerus.

He arrived at the Mill Creek Hospital, Fort Monroe, June 8th. The limb was dressed in pasteboard splints, with lint wet in cold water applied to wounds. June 20th.—Discharge free. Pus healthy. Patient's appetite good. *No* fragments of bone taken out. July 8th.—Bone united so as to bear its own weight when lifted. External wounds nearly closed. Discharge scanty. Walks about and has for some time. Suffers no pain.

Case II.—*Compound Fracture of Femur.—Gunshot.*—Stephen Bell, of Co. A, 22d N. C., twenty-three years of age, in good health, of temperate habits. While engaged in the battle of Fair Oaks, Saturday, June 1st, 1862, received a shot from a Minié rifle, the ball entering the anterior and upper third of the thigh, and making its exit nearly opposite under the folds of the nates, comminuting the femur. He arrived at Mill Creek Hospital, Fortress Monroe, June 8th, having had no treatment. On examination found three inches shortening. Used the double-inclined plane. June 20th.—Removed the plane and made extension from the foot of the cot, placing sand-bags to keep the foot in position. Discharge dark and unhealthy. Pus sacculating in the glutei muscles. July 8th.—No attempt at union—soft parts red and inflamed. Discharge bloody and dark, very offensive. Limb was now placed in a swing (*Report to be cont.*).

Case III.—*Resection of Elbow.*—S. F. Chandler, of Co. F, Hampton Legion, S. C., aged forty-one, in good health. Occupation, a laborer, when at home. While charging on a battery, at the battle of Fair Oaks, Saturday, May 31st, 1862, received a shot from an Enfield rifle, the ball entering the elbow, external to the olecranon process, fracturing the external condyle of the humerus, and following upwards and inwards around the bone, making its exit about two inches below the clavicle and to its inner third. He arrived at Fort Monroe, June 8th. Lint and cold water dressings applied—the bones were resected. June 10th.—Did not rally well after the operation, appeared stupid—the bones made no attempt at union, became denuded of periosteum. Sloughing very extensive. Beef tea, whiskey, etc., given. Great prostration and delirium set in, he died June 25th, 1862.

Case IV.—*Compound Fracture of Femur.—Gunshot.*—A. S. Kieser, of Co. C., 3d Ala., eighteen years of age, in good health, of temperate habits. While engaged in the battle of Fair Oaks, Sunday, June 1st, 1862, received a shot from a Minié rifle, the ball entering the thigh at its outer and middle third, passing directly inwards and backwards, making its exit about three inches below the fold of the nates. He arrived at Fortress Monroe, June 8th, limb very painful, but could detect nothing wrong. His wounds were dressed with cold water, like any other flesh wounds—three days after he sat up, and while his bed was being made stood up, and when he again lay down he felt a snap, and a drawing up of the limb (he says), and on exa-

mination found two and a half inches shortening, a false point of motion, and much pain in moving the limb. Extension was made from the rod at the foot of his cot, and sandbags placed to keep the limb in position. July 14th.—Patient died from exhaustion. Autopsy revealed a comminuted fracture of the femur, with no attempt at union.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, May 28, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

[The Secretary being absent, DR. J. K. MERRITT was chosen Secretary *pro tem.*]

ENUCLEATION OF SYNOVIAL BURSA.

DR. POST presented a specimen of synovial bursa exsected from the knee of a woman 62 years old, which had existed about a year. The cyst occupied the region anterior to the patella. It was so adherent to the surrounding parts as to require constantly the cutting edge of the knife to enucleate it. At the very last step of the operation the cyst was unavoidably punctured, and a quantity of dark brownish fluid was exuded. The walls of the cyst were very thick and dense. Dr. Post thinks that extirpation of the entire cyst in such cases is preferable to other modes of treatment in vogue.

NECROSIS OF THE JAW.

DR. POST next exhibited portions of necrosed bone taken from the upper and lower jaws of a child five to six years of age. These involved the alveolar processes with the teeth. It is supposed that this necrosis has been the result of the excessive use of mercury, which had produced profuse salivation.

FIBRO-PLASTIC TUMOR OF ARM.

DR. POST then presented a specimen of tumor extirpated from the lower and inner aspects of arm of a young man 20 years of age. This had existed for eight years, and had grown more rapidly of late than formerly. The tumor presented a well defined outline on its inner edge, and extended from the inner condyle upwards about four inches, occupying nearly the entire breadth of the arm. It was exceedingly hard and firm, so much so as to suggest it to be cartilaginous in character. It was movable transversely, but not at all longitudinally.

The operation for extirpation of the tumor proved much more formidable than was anticipated. During the dissection it was found intimately connected with the brachialis anticus muscle. After an extensive dissection of this muscle (a portion of which had to be removed with the tumor), it was also discovered that the tumor involved in its substance the brachial artery and median nerve. It now became absolutely necessary to exsect the involved portions of artery and nerve. This was accordingly done by first ligating the brachial artery immediately above and below the tumor with two ligatures at either point, and dividing the vessel between them. The entire tumor could not be extirpated, and a small portion was necessarily left behind, which involved the origins of the muscles at the internal condyle of the elbow. For the last three years there had been enlarged glands in the axilla of the same side, but these were not disturbed in the operation. Microscopic examination of the tumor by Dr. W. H. Draper, declared it to be of a fibro-plastic character. Dr. Post stated that a similar tumor, located in the thigh of a woman, had occurred some months ago in the N. Y. Hospital, under the care of Dr. Halsted. This tumor was also very firm, and only movable transversely to any extent. The operation for extirpation was also exceedingly difficult and tedious, on account of its intimate relations with the surrounding parts. In this case, also, complete enucleation could not be performed, and a portion of the tumor was left.

ENCEPHALOID CANCER OF INTESTINES, ETC.

DR. POST presented a fourth specimen of encephaloid cancer of testis and appendages, taken from a man about 40 years old, which had existed six years. There was a large fluctuating swelling in the right scrotum, extending to the groin. The general outline of swelling was ovoid. Near the external inguinal ring a solid round tumor was detected. There could not be discovered translucency in any part of the swelling. An explorative puncture was first made, which gave exit to a reddish-brown turbid liquid, amounting to forty-eight ounces. The testicle was then exposed. It was found to be greatly enlarged, very firm, and of a regular ovoid shape. The epididymis, however, was irregularly enlarged and much elongated. The solid tumor before detached, was discovered involving the cord, and in close proximity to the external inguinal ring, so as to allow of a very limited extent of the cord to be reached. However, it was possible to transfix the cord after the method of Sir A. Cooper, without the external ring, with a needle armed with silk thread to form a loop, by which to prevent retraction during the operation. After dividing the cord and ligating the vessels bleeding, this loop was removed. Microscopic examination of tumors by Dr. Draper disclosed them to be encephaloid cancer, although the substance of the smaller rounded tumor presented to the eye the appearance of a marked resemblance to tubercular deposit, in which incipient softening existed. This appearance was owing to an admixture of adipose cells not present in the tumor of the testis.

GUNSHOT INJURIES.

DR. POST now proceeded to exhibit several specimens of gunshot injuries from the Military Hospitals of the Chesapeake. First specimen was a number of the fragments of the os femoris, which were removed from the thigh of a soldier, wounded at the battle of Williamsburg, ten days after receipt of injury. The wound was located about the middle of the thigh. The ball had entered the anterior and outer aspect, and made its exit posteriorly directly opposite, encountering in its course the bone, and producing a comminuted fracture. When seen, the wound was in a state of profuse suppuration. The general condition of patient was much prostrated, with almost entire anorexia. The patient was 35 years of age, and lived nine days after the operation. He was mainly supported by brandy and opium. Dr. Post's second specimen was also a number of fragments of bone belonging to the elbow joint, which he exsected from the right elbow of a soldier aged 22 years, also wounded at the battle of Williamsburg. The ball had entered the joint from the outer aspect of the elbow, and had shattered in its course the head of the radius minutely; also the ulna less minutely but more extensively, involving about three inches of its upper extremity. The course of the ball having been inwards and downwards, all the injured portions of the radius and ulna were removed, and likewise the lower end of the os brachii was excised, although not involved in the injury. The patient was doing well at last accounts.

DR. POST then exhibited a specimen of the fractured trochanter major and caput femoris, taken after death from the hip of a soldier wounded at the battle of Williamsburg, who died eleven days after receipt of injury. The patient was about 40 years old, and when first seen by Dr. Post the hip and limbs were exceedingly painful from the least movement; there was great deformity of the hip with rotation of the limb outwards, and about half an inch shortening. There was also a profuse foul discharge from the wound, which extended from the trochanter major to the cleft of the nates. The patient stated that the same hip had been injured before, which had resulted in a deformity similar to that existing at the time.

Post-mortem examination revealed an extensive disinte-

gration of the soft parts about the hip-joint, and a gangrenous condition of the tissues immediately involved in the course of the wound.

Dr. Sands stated, in reference to the extirpation of synovial bursæ, that he believed it to be a very rare operation. He himself had once succeeded in enucleating a cyst entire, but with very great difficulty, located over the patella, in the knee of a woman. He thinks the difficulty of enucleation arises from the great thickness of the walls of the cyst, and their intimate connexion with the tissues in the vicinity. Dr. Buck remarked that he had successfully removed a synovial bursa from the knee which was situated over the patella. He was impelled to perform this operation on account of the great thickness of the walls of the cyst.

Dr. Hinton also stated that he had successfully enucleated and removed a synovial cyst from the knees of a woman.

Dr. Sands also remarked in reference to the fibroplastic tumor of arm, which presented such a firm unyielding character, that it was owing in his opinion to the close envelopment of the surrounding fascia. He had had a case of encephaloid cancer of the testis, in which the same indurated condition had existed, but on the removal of the tumor it was found to be soft and yielding. This condition of induration had depended on the close development of the tunica albuginea.

Other members subsequently present not having any specimens to exhibit to the society, Dr. Post then presented a seventh specimen. This was a small fragment of the eighth rib taken from a soldier 19 years old, wounded at the battle of Williamsburg. The ball, after passing through the right forearm, had entered the flesh a hand's breadth below and without the nipple, in its course fracturing the eighth rib; it made its exit posteriorly near the spine through the eighth intercostal space. About a week after the receipt of injury there appeared a diffused redness of the skin over the prominence of the sacrum, and another red spot over the posterior prominence of the ilium. *The redness over the sacrum resulted in a bedsore.* A copious discharge of fluid of a bright gamboge color had occurred from the anterior wound in the chest. This continued for about a week, and then suddenly ceased, whereupon a harassing cough supervened with profuse expectoration having the same peculiar color as discharge from the wound. At the suggestion of Dr. Post a water bed was obtained with much difficulty by the friends of the patient. After being placed on this he became much more comfortable, and soon began to improve; this continued up to the 24th ult.

In conclusion, an interesting discussion arose, participated in by Drs. Post, Krackowizer, and Markoe, referring to the condition of the gun-shot wounds in the military hospitals on the Potomac and the Chesapeake; the result of which was, in brief, that there was almost and universally a foul and sloughing state of the wounds.

Dr. Post also remarked that secondary operations had in a very large majority of the cases terminated fatally. He likewise stated that numerous cases of secondary hæmorrhage had occurred in the Chesapeake Hospitals, and related the facts connected with several happening on the tenth to the fourteenth day after the receipt of injury.

Dr. Markoe stated that from his observations in the hospitals on the Potomac, the percentage of secondary hæmorrhage was remarkably large.

The society was then, on motion, adjourned.

A Portable Styptic.—For the preparation of a convenient styptic, it is recommended by the *Moniteur des Sciences Médicales* to soak amadou or German tinder in a solution of perchloride of iron of a density of about 1·255. It should then be dried in the sun, and rubbed between the hands to restore its suppleness and porosity. Small pieces applied to leech bites soon stop their bleeding. They may be held in their places by strips of plaster.—*Lancet.*

American Medical Times.

SATURDAY, JULY 26, 1862.

CONTRACT BETWEEN SURGEON AND PATIENT.

It is not generally known to the surgeon, we believe, that he gives his services under the form of a contract. This contract may be only implied, or it may be expressed in terms. In either case he is responsible for the fulfilment of his part of the contract.

The implied contract grows out of his offering his services to the public as a qualified practitioner of his art; and in all suits for alleged medical malpractice under it, it is uniformly held by courts that the practitioner is bound to bring to his case the ordinary degree of skill of his profession. In the legal phraseology:—"The implied contract of a physician or surgeon is not to cure—to restore a limb to its natural perfectness—but to treat his case with diligence and skill." "His contract, as implied in law, is that—1. He possesses that reasonable degree of learning, skill, and experience, which is ordinarily possessed by others of his profession; 2. That he will use reasonable and ordinary care and diligence in the treatment of the case committed to him; 3. That he will use his best judgment in all cases of doubt as to the best course of treatment." The meaning of the term "ordinary skill," has given rise to much discussion, and too frequently is regarded by lawyers as requiring too high a standard of attainment. An eminent English jurist declares that all surgeons are not required to have the skill and knowledge of Astley Cooper, but only that skill which gives average results. Judge Story says:—"In all these cases, where skill is required, it is to be understood that it means ordinary skill in the business or employment which the bailee undertakes; for he is not presumed to engage for extraordinary skill, which belongs to a few men only in his business or employment, or for extraordinary endowments or acquirements."

But the surgeon may make a special contract with his patient, and then he is held strictly by its terms. If he contract to do what is *absolutely* impossible at the time the contract was made, he is not bound thereby, for a man cannot be compelled to perform an impossibility. He will forfeit all compensation for his services. If, however, he contract to do anything *accidentally* impossible, the contract is binding, "it being his own fault and folly that he did not expressly provide against those contingencies he should know might possibly transpire, and exempt himself from responsibility in certain events." * The surgeon may then contract to effect an absolute cure; and the highest degree of skill, combined with the utmost care and diligence, will not relieve him of his responsibility, "because it was his own fault, or inexcusable ignorance, that so uncertain a result should have been guaranteed successful. The extent of the physician's or surgeon's liability, under an express contract to cure, will depend upon the circumstances of the case. If he undertakes an absolute impossibility, the law will not hold him responsible for the full extent of the damage resulting to the patient by reason of the failure to cure. His responsibility extends to a forfeiture of all compensation for

* Chitty on Contracts.

medicine and service; the impossibility of the undertaking excuses him in part."* The surgeon who makes a special contract cannot afterwards plead ignorance or want of skill; he, in effect, binds himself to bring to his undertaking a degree of skill and knowledge equal to its performance.

The subject of special contracts between surgeon and patient has recently been reviewed by one of the courts of the State of Ohio, and a new and interesting phase has been given to it. A suit for alleged malpractice was brought in due form, and evidence brought forward to prove that the defendant did not exercise ordinary care and skill. The defendant claimed that he had a special contract with the plaintiff that he would not be responsible for results. The Court charged the jury as follows:—

"A physician or surgeon, in undertaking the treatment of a surgical or medical case, enters into a contract with the patient. In the absence of any special one, the general law requires that the physician or surgeon shall render to the patient the ordinary skill—not the highest order of skill, nor the lowest, but something like the average skill of the profession. The general law also requires a reasonable amount of care on the part of the physician or surgeon. These principles are applicable to persons engaged in other pursuits. A mechanic in building a house, or a lawyer in the management of a case at the bar, is responsible for the exercise of reasonable skill and care. The defendant, Dr. Butler, however, claims that he had a special contract, which obligated him only to the exercise of the skill that he himself possessed. This contract the defendant had a right to make; and this contract, if proven—a matter of which you are to be the judges—is the measure of his responsibility, in the case at issue, for surgical skill."

Whereupon the jury gave a verdict for the defendant. If this decision is accepted as a rule in our courts in suits for alleged malpractice, we see no reason why the surgeon may not always relieve himself from all liability to damages in the practice of his profession. He has only to stipulate that he will use all the skill which he himself possesses, a fact to which in several States he may be a witness, and a nonsuit would be the result.

* Elwell.

MAYOR OPDYKE ON QUARANTINE.

In reply to our strictures upon the action of the Health Commissioners, permitting yellow fever patients to be sent to Ward's Island Hospital, Mayor Opdyke denies that the Board *intended* to send yellow fever patients to Ward's Island. Of the *intentions* of that anomalous body we know nothing, but that their resolution, carried out, would have sent yellow fever patients to Ward's Island is now too apparent for even a Health Commissioner to fail to see. The Health Officer was directed to send cases of yellow fever to such of the hospitals under the charge of the Commissioners of Emigration as he deemed appropriate; but this commission have but one hospital to which they are allowed to send patients, and that is Ward's Island. Necessarily, this action of the Health Commissioners would consign yellow fever to that hospital. But the Mayor declares this a gross misstatement, and asserts that the hospitals at Quarantine, and others on Staten Island, are under the charge of the Commissioners of Emigration; meaning that they have the power to open them for the reception of patients. Now, the following are the facts in the case:—The law of 1859 declares

"It shall be the duty of the Commissioners for the Removal of the Quarantine Station to make some suitable arrangement for removing and taking proper care of such persons as may be sick at the hospitals at Castleton, and when such arrangement shall have been made, and notice thereof, in writing, shall have been given to the Commissioners of Emigration, they shall cease to send sick persons to said hospitals, but shall send them to such place as the said Commissioners shall designate."

Now, there is on the minutes of the Board over which Mayor Opdyke presides the following prohibitory officia notice from the Quarantine Commissioners:

"That by reason of such proceedings (suitable arrangements for the sick), and by operation of law, from and after the date of said notice (27th June, 1859), no sick person whatever could lawfully be sent to or received at the inclosure or establishment known and hitherto used as the Marine Hospital, by any officer, body, or authority, whatever."

The same notice was served upon the Commissioners of Emigration; the hospitals were closed, and for the last three years no patient has been allowed to enter them.

When the action of the Commissioners of Health was laid before the Commissioners of Emigration, a member said:—

"The resolution passed by the Board of Health is absurd. It substantially establishes a Quarantine at whatever point the Commissioners of Emigration have hospitals. They have none now except at Ward's Island, to which place this resolution transfers the Quarantine establishment."

Mayor Opdyke was present at this meeting as an *Ex-officio* member, and he seems to have tacitly acquiesced in these remarks.

The Board then passed the following resolution:—

"*Resolved*, That the Superintendent of Ward's Island be instructed not to permit the introduction of any patients sick with yellow fever to the Hospitals at Ward's Island, it being clearly contrary to the statutes, and believing, as we do, that our citizens would not permit persons sick with this disease to be carried through the city and placed in hospitals in their immediate vicinity."

These facts can lead to but one conclusion, viz. Whatever was the *intention* of the Health Commissioners, their action would have consigned yellow fever patients to Ward's Island. It is very apparent that had a case of yellow fever arrived on the day following the passage of this resolution, the Health Officer would have had full authority to convey such patient to Ward's Island, and this through sheer ignorance of official obligations. Of the value of such a Board to the city, and of its ability to guard with "efficiency the public health," the citizens of New York can judge.

In the concluding paragraph of his card, the Mayor descends to the low level of the mere place-seeker. Even the allusion of a Medical Journal to the sanitary condition of the city, he must, of course, believe "is obviously prompted by disappointed hopes of place." This insinuation comes with ill-grace from one, who, through his attorney, declared that the Metropolitan Health Bill—the most important measure ever before the Legislature of the State of New York—ought to be defeated, if the Mayor was not allowed a place in the Board. That beneficent measure, which our best citizens have labored years to enact into a law, *was defeated;* and this community, as well as the State, justly hold the Mayor of New York the efficient cause of its defeat. Is it strange that a foreign Journal, alluding to the defeat of the Health Bill by the Mayor of the very city

which it was designed to benefit, offering the pitiful apology that it gave *him* no place or power, said:—"*We have always had a mean opinion of American Statesmen, but they certainly merit only our contempt!*"

THE WEEK.

Hitherto we have advocated the distribution of the sick and wounded widely along the northern seaboard. The great and obvious advantage of this disposition of the invalided of the army is their more rapid recovery under the combined influences of a more invigorating climate, an ample supply of delicacies, better nursing, etc. But this policy has also its drawbacks; first, it gives great facilities to the convalescent to go home on furlough, vast numbers of whom do not return again in due time to their regiments, while many do not return at all; secondly, every soldier who returns to his former residence is an object of great interest, and naturally entertains his friends with stories, generally greatly exaggerated, of his sufferings and heroism. The effect of this is to retard enlistments. It is now, we learn, the design of the Government to treat the sick and wounded in the different military districts, at hospitals located in salubrious positions and easy of access. That this can be done to advantage there is no doubt, and thereby the inconveniences of distant transportation, and the other evils alluded to, will be avoided. Of one thing there can be no doubt, no more hospitals should be located in large towns, and those already thus established should be closed.

—

It is said that the Duke of Islay thus addressed a young colonel, who, on arriving at the bivouac, had left his men ten minutes under arms: "I see, sir, that you have never carried a knapsack upon your own shoulders." We were forcibly reminded of this hint from an old to a young officer on Tuesday week, a fearfully hot day, when the Ninth Vermont Regiment passed down Broadway. The colonel, divested of all encumbrances, rode jauntily along on his prancing steed at the head of the column, bowing gracefully and smilingly to the complimentary cheers; then followed the purple-faced soldiers, sweltering under their muskets, canteens, blankets, haversacks, and overfilled knapsacks. A few erect, but the greater number stooping, and supporting with one hand the loads upon their shoulders; and lastly the rear, consisting of wagons to pick up those who fell out of the ranks from sheer exhaustion. If it were necessary for this regiment to parade our streets, it would have appeared to much greater advantage if the wagons accompanying it had carried the accoutrements of the soldiers, instead of the exhausted soldiers themselves. The military ardor will not be very much increased by such displays.

—

In officering the new regiments it is to be remembered that there is to be an additional assistant surgeon appointed. It has been painfully evident during the past year that the medical staff is not of sufficient force. The plan of employing surgeons answers well as a temporary expedient, but it by no means meets the continued wants of the service.

Professor Hamilton is Medical Director of General Keyes' corps, and not Dr. White, as stated in a former number. Dr. White has relieved Dr Brown, of Franklin's corps.

Reviews.

The Insertion of the Capsular Ligament of the Hip-Joint, and its Relation to Intra-Capsular Fracture. By Geo. K. Smith, M.D., Demonstrator of Anatomy in the Long Island College Hospital. [*Reprinted from the Medical and Surgical Reporter.*] New York: S. S. & W. Wood, 1862, pp. 44.

The substance of this pamphlet has already appeared in this Journal. It contains the most thorough discussion of the vexed questions relating to intra-capsular fracture yet published. Dr. Smith has exhibited the most commendable industry in the investigation of this subject, and great sagacity in the subsequent discussion.

Caries of the Elbow-Joint; Operation of Excision, with the Recovery of a Useful Arm. By N. C. Husted, M.D., of New York City. pp. 16.

Excision of the elbow-joint for caries is now regarded as one of the most successful operations in surgery. Dr. Husted's case illustrates in a marked manner, the slight constitutional disturbance which generally follows this excision; the rapidity of the cure, the great improvement of the general health of the patient, and the subsequent usefulness of the limb. The pamphlet contains a useful resumé of the literature of excision of the elbow-joint. It is a reprint from the Transactions of the New York State Medical Society.

Correspondence.

IS IRIDECTOMY A NEW OR OLD OPERATION?

[To the Editor of the American Medical Times.]

Sir:—Dr. Julius Homberger having done me the honor, in a kind spirit, to enlighten me on De Graaffe's views of Iridectomy, I beg to state that he has corroborated rather than weakened my opinion as to who was the originator of the *fashionable* operation in question.

First.—Dr. Homberger admits that iridectomy is identical with Cheselden's operation, or, in other words, is the substitution of a new name for an old and obsolete one. He states that De Graaffe performs iridectomy for glaucoma and iritis, and that in these the operation is performed for a therapeutic purpose, and further on he says that according to De Graaffe, glaucoma depends on a peculiar *exudative inflammation* of the uveal coat. Is not inflammation of the uveal coat, inflammation of the posterior surface of the iris? Yes. Is not inflammation of the uvea therefore inflammation of the iris? It is a difficult thing to draw a line of demarcation between the anterior and posterior layers of the iris, and such distinction cannot be made; therefore, inflamination of the uvea must be considered as identical with the old term iritis. Is not the exudation of lymph characteristic of iritis? Does not De Graaffe point out that the exudation of lymph is attendant on inflammation of the uveal coat? Is not inflammation of the iris and uveal coat, therefore, as De Graaffe shows, identical?

Dr. Homberger does not attribute the effect of iridectomy to the quantity of blood lost during the operation and the escape of the vitreous humor, but to the diminished intra-ocular pressure following the division and excision of the iris. It will be remembered that I fully demonstrated the fallacy of this theory, but strange to say, Dr. Homberger precisely gives in explanation my original views of the mode in which the operation proves serviceable. I stated that section of the iris was followed by the same results as the section of the sterno-cleido mastoid muscle in wry

neck, the section of the rectus in strabismus, and the section of the intestinal tube in case of *intussusceptio;* now, in explanation of the operation of iridectomy, Dr. H. says: —"I believe that the change in the division of the group of muscles has a parallel in the influence of the *division* of the *sphincter ani* in certain diseases of the rectum and *incision* of the circular muscular fibres of the vagina in *vaginismus.*"

Dr. Homberger states that the enlarged condition of the pupils is of no use whatever for the sight. Has he ever examined the pupils of a convict confined in a dark cell who could see objects that he himself would fail to discover? Is not the enlarged pupil in such cases necessary to admit the rays of light? Would there be "a dazzle" in such a case? Certainly not.

Dr. Homberger says the pupils are dilated *ad maximum* in glaucoma. I would be glad to know how many cases of glaucoma he has seen. It is well known that glaucoma is a very rare disease, and I am positively of opinion that neither himself nor De Graaffe ever relieved or restored to sight a patient with true glaucoma, characterized with fully dilated pupils, by the operation of iridectomy. In support of this declaration I will cite De Graaffe. He says glaucoma is caused by inflammation of the uveal membrane accompanied by exudative lymph. Having proved that inflammation of the uveal membrane and iritis is identical, the question suggests itself, does dilatation of the pupil usually follow iritis? The answer to this question is, that almost invariably instead of being dilated the pupil remains contracted after iritis. Who has ever seen dilatation of the pupil follow iritis? Does it not follow, therefore, that De Graaffe's cases were not cases of true *glaucoma,* but rather cases consequent upon previous inflammation of the iris extending to the choroid and hyaloid membrane?

Dr. Homberger believes that iridectomy is never called for in myosis, and that the use of atropine will never fail to cause dilatation of the pupil. With respect to this declaration there is the positive evidence of Beer, whose authority and veracity up to the present time have not been called in question, that myosis is followed by incurable blindness, and that no medicinal agent will cause dilatation of the pupils. Let me inquire what course Dr. H. would adopt in a case such as Beer describes? Would not the ingenuity of his preceptor, De Graaffe, suggest to him that it was a case of spasmodic contraction of the iris, and that division of the muscular fibres would produce the necessary relaxation and be attended with dilatation of the pupils as a consequence; that in such a case as this, *intra-orbital pressure* would be removed, that the group of muscles would be relaxed, that the irritation of the irides muscles being removed, the irritation of the *recti* muscles would be also removed; knowing that the iris receives its nerves from the lenticular ganglion, as also that the lenticular ganglion *communicates* with the third nerve through a small branch, thus establishing a *community* and *reciprocity* of action between the *recti* muscles and the iris.

According to Dr. Homberger, De Graaffe operated when there was chronic iritis and irido-choroiditis, when there was extensive posterior synochus and exudation in the pupil, the effects of acute iritis. Will any man doubt that Dr. H. fully establishes Dr. Ryan's priority in the performance of the operation, after reading Mary Bryan's case, cited by me from the Dublin Hospital Reports.

Dr. Homberger admits the truth of the analogy between Dr. Ryan's case and De Graaffe's operation, and goes on to say in reference to Dr. Ryan's operation (I will quote his words): "Sufficiently proves that he merely executed the operation for the *production* of an *artificial pupil* for an *optical purpose.*" I cannot understand what importance is to be attached to the restoring of vision by an artificial pupil made by section of the iris? Is it made for any other than for an *optical* purpose? I cannot understand what object De Graaffe had in view, unless it was the admission of the luminous rays of the sun through the pupils. On this point I am ignorant. Whatever other purpose he intended to accomplish, it is certain that De Graaffe performs his operation for an optical purpose, as it enables the individual to see external objects. But Dr. Homberger considers iridectomy, when performed for an opacity of the cornea, is for an optical purpose, but when for closed pupil, induced by iritis, it is to act as a therapeutic agent. It will be recollected in Mary Bryan's case, there was no opacity of the cornea; therefore, on Dr. H.'s own showing, Mr. Ryan's operation must have been intended to act as a therapeutic agent.

With respect to the ophthalmoscope, I may say that it throws no light on glaucoma. The vitreous humor in a healthy state is transparent; it is also transparent, although changed slightly in color, when in a disorganized state. The ophthalmoscope is useful in ascertaining whether a case is one of glaucoma or cataract, but it has no power in deciding the claim of the priority of Ryan and De Graaffe, with respect to the operation of iridectomy. Sir B. Brodie, I am satisfied, would corroborate my views with respect to the ophthalmoscope; he has had sad experience of its utility.

Dr. Homberger hints that my remarks on the causes of glaucoma and myosis belong to the last generation, and are erroneous. Let any person study the physiology and pathology of the muscles, and then demonstrate the falsity of my theory, and I will believe him; but I care not for any man's assertion, until he gives other proofs than his own assertions, that he is right and that I am in error. I maintain that my views with respect to the *recti* muscles and iris are physiologically and anatomically well founded, and that the spasmodic contraction of these muscles will cause the prominence of the eyeballs, the convexity of the cornea, the contraction of the pupils, the absorption of the *pigmentum nigrum,* the breaking up of the *areoli* of the vitreous humor, and consequently the disorganization of the vitreous humor. The whole phenomena can be explained on mechanical principles, by any man who understands the action of the muscles, the location of the muscles, the form and position of the globes of the eyes, and the organization of the exterior as well as the interior of the eyeballs. Dr. Homberger is gratified that the operation of iridectomy, which is only known imperfectly in the United States for the last two years, will now be "ventilated."

I trust, as I am honestly and magnanimously disposed, that I will not be charged with being hypercritical, censorious, or cynical, or the type of the individual satirized by the Poet:—

> —— "Quid, cum est Lucilius ausus
> Primus in hunc operis componere carmina morem,
> Detrahere et pellem, nitidus qua quisque per ora
> Cederet, introrsum turpis."

John O'Reilly, M.D.
230 Washington Square East, New York, July 19th, 1862.

DR. PHILLIPS'S RESIGNATION.

[To the Editor of the American Medical Times.]

Sir:—A friend has just called my attention to a communication contained in your issue of July 5th, which under the plea of seeking public sympathy for fancied wrongs suffered by Dr. Phillips and his predecessor, while filling the office of Surgeon in the 102d Regt. N. Y. S. V., is *really* intended as an extinguisher of any claims to military reputation to which the commanding officer of that Regiment may be vain enough to aspire.

The motive for this attack is quite transparent. It is not that the ex-surgeon feels any great solicitude about anything which may advance the good order, military discipline, or effectiveness of the Union Army. There is evidently personal malice at the bottom, which must be ventilated in some way, and which eagerly grasps at this pretext as a fitting opportunity.

As to the causes *assigned* for the resignation of these surgeons, and which is made the basis for this vindictive

attack on the reputation of an officer, who by reason of his absence cannot reply to it, supposing them to be true, and the *only* causes, what do they imply? neither more nor less than this, that the commanding officer, in the faithful discharge of his duties, and exercising a power with which he was invested by virtue of his office, enforced a proper discipline in the camps—which discipline was not in accordance with the expectations, or desires, or plans of the subordinate.

But in reality there were other and more potent reasons which made it necessary for the "predecessor" to resign. Suffice it to say, it was important that the office of Surgeon should be filled by one both competent and patriotic.

An ardent sympathizer with secession should hold no place of responsibility in the Union Army. Mr. Editor, I have perhaps said enough by way of reply to this vituperative article. Less I could not well say, if I noticed it at all. I feel no concern about any damage that may be suffered by the party assailed. But I protest against a scientific journal being made a vehicle for personal attacks on the reputation of public men, merely to gratify personal spite.

I.

At a meeting of the Board of Commissioners of Health, at the Mayor's Office, New York, July 15th, 1862, present Hon. Charles C. Pinckney, *President of the Board of Councilmen, presiding, pro tem.*, Dr. Alexander N. Gunn, *Health Officer*, Dr. Lewis A. Sayre, *Resident Physician*, Dr. Jedediah Miller, *Health Commissioner*, (after other business was transacted,) on motion of Dr. Sayre:

Resolved, "That a copy of the letter from his Hon. the Mayor, in the *New York Daily Times*, of the 14th inst., in answer to an article republished by that paper from the American Medical Times, relative to the action of this Board in the matter of the Floating Hospital Nightingale, be sent by the Clerk to the Editor of the last named Journal, with a request that it be published therein in justice to this Board."

(Extract from the Minutes.) Wm. H. Armstrong, *Clerk.*

YELLOW FEVER AND QUARANTINE REGULATIONS.

A CARD FROM MAYOR OPDYKE.

New York, Saturday, July 12, 1862.

To the Editor of the New York Times:

Your paper of this morning contains a bitter and ungrounded attack on me, copied from the American Medical Times. It is based on the action of the Mayor and Commissioners of Health, at the meeting of the Board on the 16th day of June last. That action, so far from endangering the public health from yellow fever, resulted, as it was intended, in the furnishing full hospital protection to the people of New York against any danger from yellow fever patients arriving at Quarantine.

The facts are these: On that day the Health Officer, Dr. Gunn, reported to the Board that the floating hospital ship *Nightingale*, then in the lower bay, in good order, only needed physicians, nurses, and supplies, to make her ready for patients; that the State law required the Commissioners of Emigration to receive and provide hospital accommodation for all persons arriving at Quarantine affected with contagious or infectious disease; that he had asked the Commissioners, in compliance with their duty under the law, to provide for yellow fever patients by furnishing attendants and supplies for the floating hospital, and that they had declined to do so.

As the season was at hand when yellow fever patients might be expected, it was deemed necessary by the Commissioners of Health, on the above statement of the Health Officer, that prompt measures should be taken to provide safe hospital accommodation for such as should arrive. It was accordingly determined that the Mayor, who is made by law one of the Commissioners of Emigration, should attend the next meeting of that Board, to take place in two days thereafter, and request it to take immediate action as to furnishing the hospital ship. As to any patients who might arrive meantime, it was necessary that such should be sent somewhere, and as it was known that the Hospital at Quarantine and others on Staten Island, as well as the Ward's Island Hospitals, were under the charge of the Commissioners of Emigration, the following resolution was adopted:

Resolved, That the Health Officer be requested to send any cases of yellow fever which may come into his hands at Quarantine, to such of the Hospitals under the charge of the Commissioners of Emigration, as he may deem most appropriate, during the pendency of negotiations with the said Commissioners as to the support of the Floating Hospital.

It was neither expressed in the resolution, nor was it in fact for one moment intended, that Dr. Gunn should be requested by the Board to take yellow fever patients to Ward's Island, as is asserted by the person who wrote the abusive article referred to.

This action of the Commissioners of Health was followed by the adoption of a resolution at the next meeting of the Commissioners of Emigration, at which I was present, proposing to advance the necessary funds, until then withheld, to furnish the Floating Hospital with attendants and supplies.

Thus the action which is made the pretext of a violent complaint, was in fact that which compelled the furnishing of safe means of avoiding the danger pretended to be complained of.

The Board of Commissioners of Health have applied themselves most industriously and conscientiously to the sanitary interests committed to their charge, giving prompt attention to every complaint, and guarding with zeal and efficiency the public health.

The attack thus answered, like previous attacks on me in the same journal, is so obviously promoted by disappointed hopes of place, rather than by any regard for the sanitary interests of the City, that I should have deemed it unworthy of notice, had not its gross misrepresentations related to a subject on which the public mind is always sensitive.

George Opdyke.

ELECTRO-MAGNETISM AS A THERAPEUTICAL AGENT.

[To the Editor of the American Medical Times.]

Sir:—As an excellent conveyance of intelligence I would ask the use of your columns to call the attention of the profession once more to Electro-Magnetism as a valuable therapeutic agent, particularly in diseases of the nervous system. This is an old but much neglected remedy, and although somewhat troublesome, and requiring time to its proper application, I think its great efficacy entitles it to more general use. It is but too true that it has become a too general favorite with quacks and impostors, and that even they, in their ignorance, have been very successful with it; and I would urge this also as an important reason why it should not be discarded by the educated physician. Its similarity to electricity and galvanism, which agents are not so efficient and safe, has also created a prejudice against it; and another great obstacle arises from the great variety of electro-magnetic machines manufactured, many of which are worthless in the treatment of disease. I have found, after several years' experience, that electro-magnetism, if properly applied with proper medicines, as an educated physician only can apply it, is one of the most powerful and safe stimulants to the nervous system, a very powerful tonic to the muscular system, stimulating the circulation, expanding the capillaries, and by these means increasing the size of the muscles. I can produce diaphoretic, sedative, excitant, contractive, and expansive effects with it; instantaneous counter irritation, and even a moxa, all depending upon the pole applied, the part to which it is applied, the medium of application, and the duration of the application, as well as the direction in which the conductor is applied. Much depends also upon the kind of current applied. Not wishing to intrude too much upon your space, I will only briefly describe the instrument I use, leaving a description of several cases of different diseases,

and the modus operandi pursued, for another number, if it should be found of interest.

I use a battery of one cup containing two plates of zinc and one of platina, which is excited by very dilute sulphuric acid, the galvanic current from this is conducted to a helix of insulated copper wire wound around a temporary magnet of iron wires, thus converting it into electro-magnetism. The main currents evolved are two; one, the direct, is a steady current, very gentle and free from shocks, being merely the original battery current strengthened by induction; the other a very powerful current, being also steady and free from shocks, but broken at every vibration of the alternately repelled and attracted spring hammer at the armature, thus making it of alternating polarity, while the direct current has an unchanging polarity; there are other currents, being a combination of the two just described. The currents are conveyed through tinsel cords to various apparatus, such as handles, cups, wires, sponges, plates, tubes, and brushes, and are applied as circumstances may require.

H. Lassing, M.D.

No. 20 Oliver st., N. Y., *April 4th*, 1862.

FOREIGN CORRESPONDENCE.

By PROF. CHARLES A. LEE.

London, June 14th, 1862.

In my last letter, I gave some account of the "Social Congress," now in session in this city, and especially the "Health Department" of the association, whose meetings I have generally attended. Another body, called "*Congres International de Bienfaisance*" has also been holding its sessions at the same time, and many of the subjects brought before it have related to sanitary service and public health. At its sitting yesterday, a paper was read, prepared by Miss Florence Nightingale, which deserves some attention. The subject was "*On Army Sanitary Administration and its Reform under the late Lord Herbert.*" From this paper it appears that the present improved sanitary condition of the army has been the result of the Crimean catastrophe. At that period, the death-rate in the British army from consumption and other diseases mainly occasioned by the troops breathing foul air, far exceeded the *total* death-rate among the civil population of corresponding age. "The Barrack and Hospital Improvement Commission" having been appointed in 1855, proceeded at once to improve the ventilation and warming of the barracks, without machinery of any kind. Under their auspices drainage was introduced, and cesspits abolished; the water supply extended; baths introduced into both hospitals and barracks; and the lavatory arrangements generally improved. Barrack kitchens have been completely remodelled; the cooking apparatus improved; gas introduced and made to assist in the circulation of fresh air; stables have been ventilated, and ashpits abolished. In accordance with the recommendation of the commission, more simple and healthy principles for the construction of future barracks and hospitals, for insuring better drainage, more efficient ventilation, and more cubic space for sinks and wells, will be adopted. These principles have already been carried out in the Mediterranean stations. The result of these general improvements in the sanitary condition of the army is, that the mortality has been reduced one half. A school for practical cookery has been established at Aldershott, for training regimental and hospital cooks. The second sub-commission was appointed for reorganizing the medical department, which up to that time made no provision for systematically caring for the soldier's health; in fact, it was only fitted to attend them when they came into the hospital, and not to prevent their being obliged to go there. The new code of regulations established by the commission has been entirely successful.

The *third Commission* was charged with organizing the army medical school at Chatham, for the instructing of army medical candidates, of which I gave an extended account in a former letter. This was opened in 1860 by Lord Herbert, and has since been working in the most satisfactory manner, and there can be no doubt that the instruction there imparted, is one of the causes of the diminished death-rate.

The *fourth Sub-Commission* was charged with organizing the army medical statistics, which were then very imperfect and incomplete; whereas, now, the exact state of health of the men in each regiment can be ascertained at once. Another great sanitary reform was effected in the improvement of the purveying department, which had broken down so thoroughly in former wars, its defects being visited chiefly on the sick and wounded, for whose benefit it was established. Lord Herbert, in 1861, issued a new purveying code of regulations, which have been tried in foreign service, and have been found to fully answer every purpose which they were intended to fulfil. He also organized and trained army hospital corps to nurse the sick, which has proved most beneficial in alleviating the sufferings of the patients. The proof of the great success of these various improvements, was afforded in the last Chinese war, when the mortality of the force, including the wounded, amounted *to little more than three per cent. per annum*, while the "constantly sick" in hospital was little more than at home. Day-rooms and institutions have been formed for the purpose of assisting the struggle against those great moral evils which were supposed to be inseparable from garrisons and camps. If no rational amusements are provided for the troops they are exposed to great temptations, and profligacy and vice must necessarily be the result of want of occupation. It is a serious question whether Government ought not to interfere to put down the open temptations to vice, as it puts down the open temptations to crime. At all events, soldier's barracks should be made more of a home to them. Let clubs be established, and increased means of occupation be provided, such as workshops, galleries, out-door games, and amusements, and rational recreation be provided in the shape of lectures, etc.

Such is a brief abstract of the main points in Miss Nightingale's paper. It certainly did great credit both to her heart and head. There can be no doubt, I think, that the morals of soldiers is a subject demanding far more attention than it has yet received, inasmuch as it has a direct bearing on health. The statistics of venereal affections in armies, if correctly reported, would not only excite astonishment, but might lead to some practical measures to diminish a class of diseases which weekly increase both the mortuary and invaliding tables.

I have introduced this subject in my letters on account of its great importance, as connected with our own extensive and military organization and operations at this time. It would be strange, indeed, and inexcusable, if we did not profit from the mistakes, as well as the experience of other nations, and if we did not fully avail ourselves of all the statistical results of the extended observations of medical officers connected with European armies. The object of army medical statistics, indeed, is to obtain the means of ready and accurate comparison of the health of troops at different periods, at different stations, and in different barracks or quarters, and of comparison with the sickness and mortality in civil life, so as to enable medical officers, at all times, to take immediate measures to check or counteract whatever may injuriously affect the health of the troops, whether in peace or war. I trust that the talented gentleman recently appointed to the most responsible and arduous office of Surgeon General in our army, places a proper estimate on the value of accurate and well digested statistical reports; as it is from them alone that we can have an exact and comprehensive view of the army; can know the number, week by week, of effective men, and the number ineffective from each particular cause; from them only, in short, can be learned the health of the army at any given time. They will show at once the ex-

tent to which the violations of the laws of nature are carried, and the salubrity or insalubrity of certain localities; as we know that the mortality, exceeding a determinate rate, is not inevitable, so we equally well know, that if that rate is exceeded, there are errors of some kind which need instant correction. *These statistical returns should be made weekly in our army*, and a sufficient force employed to tabulate them at once, and not wait, as has heretofore been the case, *till the year has expired*, before even entering on this labor; for by so doing, their value is chiefly lost. What we want to know is, the exact amount of sickness in the army at different stations, and the diseases which are prevalent at the present time, for, without this knowledge, no rational efforts at improvement can be made. This subject, I know, has been constantly kept in view by the United States *Sanitary Commission*, whose enlightened and well directed efforts have resulted in such substantial benefits to our army. I trust they will not relax in their efforts to procure all needed statistical returns, to fully accomplish the above-named objects. No one can overestimate the value in a hygienic and sanitary point of view, of the information that may be gathered from observations made by our army medical officers during the present war. The field of observation is so vast, that these observations, if properly used, will not only enable us to measure the influences of all known causes on health, but will probably lead to the discovery of new causes, both of impaired and of vigorous life. They will not only be the means of improving the health of the army, but also furnish new contributions to the science of health, in which our whole nation is concerned.

The English, though proverbially a practical people, have been very slow to avail themselves of the advantages of accurate army and navy medical statistical reports. You will perceive from the tables I sent you, relating to the health of the British army and navy, in different parts of the world, what a vast amount of unnecessary sickness and death there still is in these departments; and when this subject was up in the "Health Department" of the "Social Congress," I felt it my duty to say, that I did not think that the sanitary regulations on board the British vessels had materially improved since the days of Captain Cook, who, in a voyage round the world, lasting three years, and with several vessels, never lost a man from disease, and scarcely had a man unable to perform duty, during this whole period.

Medical News.

Brigade-Surgeon Adam Hammer is ordered to report to the Medical Director at St. Louis for duty in charge of one of the general hospitals in that city.

Assistant Surgeon Harrison Allen, Medical Cadet F. G. H. Bradford, and Hospital Stewards McManus and Austen will report in person to Surgeon Letterman, Medical Director of the Army of the Potomac, for duty.

Surgeon Mitchell, 1st Maryland Volunteers, will report for duty to Surgeon McVarlin, Medical Director of Gen. Pope's command.

Surgeon Parker, U. S. Army, will repair to Chicago to relieve Brigade-Surgeon Blaney, in his duties as Medical Purveyor, the latter to report to the Surgeon-General.

Surgeon William Whelan, to be Chief of the Bureau of Medicine and Surgery.

Theoron Woolverton, of New York, to be Assistant-Surgeon in the Navy.

J. H. Boucher, of Iowa, to be Brigade-Surgeon of Volunteers.

The following were confirmed as Assistant-Surgeons in the United States Army:—Wm. H. Keene of Pennsylvania, George L. Porter of Pennsylvania, David S. Huntington of Pennsylvania, T. W. Williams of District of Columbia, Charles M. Colton of Virginia, T. M. Brown of Ohio, Charles S. Degraw of New York, Edward C. Strode of Illinois, Andrew H. Smith of New York, and Van Buren Hubbard of Ohio.

Brigade-Surgeon Lecompte has been ordered to repair to Chester, Penn., to take charge of the general hospital at that place.

Brigade-Surgeon C. L. Allen is ordered to report to the Surgeon-General as a member of the Board for the Examination of Surgeons of Volunteers.

Brigade-Surgeon D. H. Prince and Surgeon H. Jewitt, of the 10th Mass., remained with the wounded after the battle of Malvern, are still in the hands of the enemy. Surgeon M. S. Killenger of the 100th N. Y. remained with his wounded on the Chickahomony, and is a prisoner.

Brigade-Surgeon A. B. Crosby, late Medical Director Peck's Division, one of the most talented and energetic medical officers in the army, has resigned, and will return home immediately. Ira Perry, Contract Surgeon, has been assigned to the 2d R. I., as Act. Asst. Surgeon. J. G. Strowbridge to the 39th Ill.; J. W. Hinchley to the 13th Ind. Drs. Sargent, M'Collister, and Pierce to the batteries under command of Major West.

L'Union Médicale gives the following catalogue of diseases under which the Grand Monarch, Louis XIV., suffered at various times of his life. The facts are obtained from observations made by his physicians, Vallot, D'Aquin, and Fagon. The king appears to have had his share of human bodily infirmities. "At seventeen, he caught a violent blennorrhœa. Some time afterwards, he narrowly escaped falling a victim to confluent small-pox. He next suffered from a scirrhous induration of the breast. At Calais he caught a putrid fever; and afterwards had the measles, dysentery, odontalgia, arthritis, abscess in the left armpit, and fistula in ano. Besides this, Louis XIV. had an anthrax in the neck. Moreover, all the teeth in his upper jaw were extracted, in consequence of a fistulous opening in this bone, which made a communication between the mouth and the nose, so that liquids escaped by the nose, the royal nasal mucosities giving off a cadaverous odor. Lastly, he is represented as having been bled forty-four times, as having had fifty lavements, and swallowed two hundred and eleven purgatives. Gouty, podagrous, and afflicted with gravel during many years, this lofty individual at last perished of gangrena senilis."—*Brit. Med. Journal.*

The Cholera at Mauritius and the French Medical Practitioners at Réunion.—A very interesting and even affecting correspondence is published in *L'Union Médicale*, between the medical men of the French Islaud Réunion and the authorities of Mauritius. It would appear that at the time the cholera was raging in the latter island the practitioners of Réunion wrote in a body to the authorities of our colony to offer the services of as many of them as would be required to go and assist their English brethren. The disease, however, declined rapidly, and the authorities answered the generous offer in a very appropriate manner, thanking the medical gentlemen of Réunion, and announcing to them that, although touched by their willingness to assist the authorities, they were, owing to the mitigation of the epidemic, able to cope with the disease.—*Lancet.*

Dr. Collins' Private Institution at Great Barrington, Mass., for the treatment of chronic diseases of women, we learn, continues to be well patronized, notwithstanding the war, which has prevented many from coming from the South, as in former years. So crowded has this establishment been of late, that the Doctor has added another building, which is just completed, and furnished.

Our profession must provide suitable means, if they expect to meet the exigencies of their cases, otherwise people will resort to empiricism.

Dr. Horace Green has offered $20 to each of the first fifty volunteers in the County of Westchester, N. Y.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.

SESSION 1860-61.

BY A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

LECTURE X.—PART IV.

Dentition and the Nervous System—Frequency of Diseases of the Nervous System in Infantile Age—Comparative Anatomy of the Infantile Cranium and Brain, Weights and Measures.

THE nervous system of children has hitherto been the subject of our consideration, inasmuch as the circulation of the blood is influenced by it. It is, however, but just that we now consider it in that light and also in relation to its other functions. This is not only an important and not very easy task; not very easy, as both of its anatomical structure and the physiological actions its morbid conditions frequently resist a successful exploration; very important, from the very frequency of cerebral and other nervous affections of a more or less severe nature. Mauthner asserts to have observed 1747 cerebral diseases in 15,836 cases of sickness in children. According to Dr. Forsyth Meigs, there were in Philadelphia, in the course of five years, 3,970 deaths in children from diseases of the brain, 4,204 from diseases of the digestive organs, and 3,376 from diseases of the respiratory organs; and West remarks, that of 16,258 deaths resulting from diseases of the nervous system, in London (1842 and 1845), 87 per cent. were observed during the first five years. These are deaths. Only long-continued statistical reports on the occurrence of nervous diseases and functional troubles, not followed by fatal termination, could give a correct idea of the numerical prevalence of such affections. The number of deaths, however, is already so large, that as not only material organizations but also functional disorders of the brain, spine, and nerves, are frequently observed, the percentage of nervous affections, both fatal and not, is enormous. As to material changes of the substance of the nervous system, it is true that many diseases of adults are not, or rarely, found in early age, for instance, carcinomatous and sarcomatous degeneration, certain forms of encephalitis, etc., but there are a number of prevalent forms by far more frequent in children than in more advanced age. Amongst these latter, I count anomalies of the amount of blood contained in the bloodvessels of the nervous system, particularly its centres; meningitis in two forms, both genuine and tubercular; apoplexy; hydrocephalus; and also hypertrophy. Mere functional disorders, that is, such diseases of which with our limited means of investigation, and narrow knowledge, we have not been able hitherto to find the anatomical foundation, are also frequent. I need but allude to the frequency of convulsions in infantile age, which in a large percentage of cases will pass away without apparently leaving behind themselves any serious consequences.

I have stated that our knowledge of the more minute anatomy, and also the physiology of the nervous system, especially in its anomalies, is still very limited; nevertheless, those facts which anatomical researches have pointed out, will lead to the conclusion that the prevalence of nervous diseases in early age, is readily explained by the nature of the infantile nervous system. This is principally true as far as the brain and skull are concerned, as the spine and nerves, being less amenable, have been less closely studied. The anatomical facts to which, before entering into the discussion on the connexion of dentition with nervous affections, I desire to direct your attention, belong principally to the condition of the cranial bones and the cerebral substance.

In the newly-born ossification has made most progress in the auditory bones, labyrinth, portion of the petrous bone, and lower maxilla. The frontal bone still consists of two halves, its tuberosities are prominent, and no frontal cavity has commenced to be formed before the end of the first year. The occipital bone consists of four parts, the sphenoid of three; the parietal bones have not yet acquired their square condition, have as it were a fibrous appearance, and prominent tubera. The temporal bone is still divided into four parts (the petrous, mastoid, and squamous portion, and the annulus tympani); the ethmoid into three, with very few signs of ossification. There is still, in the upper maxilla, a sign of the presence of the intermaxillary bone; the maxilla containing the alveoli for two incisors, the canine, and two molar teeth, and a distinct but very small antrum Highmori. The palate bones are low, little developed, but consist already of a single piece. The inferior maxilla is divided in two halves, and contains the twelve central alveoli. In the upper and lower dental alveoli there are already the gelatinous germs of the twenty temporary and the first four permanent teeth.

The cranial bones are kept in connexion by sutures and sutural cartilage, this latter being the remnant of what has surrounded the cranial cavity in early fœtal life; the pericranium adhering more tightly to them than to the bones themselves. The large quadrangular fontanel, formed by the coronal and sagittal sutures, is large, of the size of a square inch and more, larger in large heads, smaller in small, and of enormous extension in hydrocephalic ones; the normal period of its closure being from the thirteenth to the fifteenth month. After this age it is found open in rhachitical children; that persons in advanced life should have an open quadrangular fontanel, is an excessively rare occurrence. A few cases of this anomaly have been given in my essay on the premature closure of the cranial sutures and fontanels, and its etiological and prognostic importance, and an additional one has come under my notice a short time ago, in a young lad whose fontanel was still somewhat pulsating at the age of twelve years. The triangular small fontanel formed by the sagittal and lambdoidal sutures is closed in the mature child, as well as the lateral ones. Additional ones are rare, and then are only the results of ossification having commenced from a number of supernumerary points. The peculiar undulated shape of the sutures, or rather the margins of the cranial bones, is but gradually transformed into the dentated form, which is the common appearance in later and life, after the third year. Real ossification will not commence before the twentieth year, and then first on the inner side of the cranium. Congenital or premature ossification of the sutures, or even simple closure, gives rise to serious consequences. Unilateral premature closure interferes with the symmetrical development of both skull and brain; if universal, it suppresses the normal growth of both. Microcephalus and idiotism result therefrom, or at least, from the brain being compressed, anomalies of the cerebral functions will be the consequence. Epilepsy or paralysis, naturally incurable, will follow. Or, in milder cases, the constant pressure on the cerebral substance will, by itself, or in the course of inflammatory or feverish diseases, bring on cerebral symptoms which, from the nature of the complication, will be seldom suppressed, and generally prove fatal. Perhaps the indistinct knowledge of this fact has induced old authors to call the Wormian bone, contained in a supernumerary fontanel of the frontal suture, from its apparently giving more room to the anterior portion of the brain, by the name of, not only interfrontal, but also anti-epileptic bone.

The head of the newly born has an irregularly round shape; its height amounts to about the fourth part of the length, its weight to about a fifth of the weight of the whole body Its principal diameters are these: Four or five inches from

occipital to frontal, three and a half or three and three quarters between the two parietal bones; five or five and a half from occipital bone to chin, three and a half from forehead to chin; its longest circumference is from fourteen to sixteen inches; its shortest, over the vertex, ten and a half to eleven inches. Its greatest width falls a little below the two parietal protuberances. The bones of the cranium are more injected with blood, bluish, and are more easily inflected than fractured; it predominates over the face. The frontal and parietal tuberosities are prominent. The upper margin of the parietal bone stretches in an almost perpendicular line above the lower one. The occipital bone lies more horizontally. The points of insertion of the muscles are less developed; nor are the supercilliary arches very distinct; they are formed with the development of the frontal sinuses, whose first beginning dates from the second year, but which scarcely are worthy of the name before the tenth. The hair covering the scalp is short, thin, and often copious, the aponeurosis thin. In proportion to the general growth of the body the face gradually commences to predominate, the basis of the cranium growing fastest; mostly so in its posterior portion, together with the rapid growth of the occipital bone before the fifth year, while between the fifth and tenth year, in the period of the protrusion of the posterior molar teeth, the anterior portion develops at a more rapid rate. Gradually the frontal bone appears flatter, for several reasons; for its superior margin ascends; its inferior one is drawn anteriorly by the gradual prominence of the superior maxilla; and the formation of the frontal sinuses helps to bring on the same result. The occipital bone by and by loses its horizontal position, becoming more perpendicular.

After all, the several parts of the head do not grow at the same rate. The parietal bone has its full circumference at four years, while the frontal bone still continues growing. For this reason, the parietal portion of the large hemispheres of the brain is soon left behind by the anterior frontal lobe. The cranial cavity of the new-born is about a fourth or a third of that of adults, but already in the second year grows from 482 cubic centimetres up to 999, while the weight of the skull at that period reaches already three times its original amount. The occipital portion of the cranial cavity is very small in the newly born, being only 5 per cent. of the whole. The frontal portion is as much as 13.89, the parietal 81.11 per cent. But as early as the second year, both the occipital and the frontal vertebræ grow each by 0.5 per cent. All these facts you will find to be in strict correspondence with the remarks I shall have to make on the relative development of the single portions of the brain.

The dura mater adheres tightly to the cranium, in infantile age, partly by means of blood-vessels, and partly by conglutination with the sutural cartilages. In the newly born it is loosely attached opposite the parietal tuberosities. It is firmly adjacent to the cerebral surface, strongly injected, bluish, and transparent. With advancing age it gains in solidity, but loses its transparency and injection. The arachnoid membrane and pia mater are very thin, colorless, transparent, and fragile; they show large veins filled with dark blood; there is a good deal of cerebro-spinal fluid, but no Pacchionian granulations are observed. The choroid plexus are of a similar nature to that of the meningeal membranes; they are delicate, and contain more blood. All these facts constitute just as many differences from the condition in which the same parts are found in more advanced childhood, in adults, and in senile age.

The brain shows a lower degree of development. Its substance is less white, more transparent, and of a reddish-greyish color. It is of almost gelatinous consistency, at all events much less solid than in advanced age, and the division into medullary and cortical substances is less distinct. Only some parts excel by their proportionate hardness and their white color, viz. medulla oblongata, corpora quadrigemina, corp. mammillaria, thalami, and pons Varolii. The fibrous appearance of the large hemispheres is not yet recognisable; the gyrations are thicker, less prominent, and fewer. The lateral ventricles exhibit less serous contents, and their walls are more even. The substance of the brain, finally, contains but little serous blood; only near the borders of the thalami there are a large number of blood specks.

Not only are these general differences between the brain of the infant and the adult recognisable in every specimen, but there are some which are of quite a specific anthropological importance. The relation of the several parts of the brain to each other changes according to age, as is well proven by accurate measurements, and weighing. The relative weight, for instance, of the large hemispheres, and the occipital portion of the brain, are particularly instructive. According to Huschke the cerebellum of the newly born weighs 25 grammes, that of the adult from 180 to 193 grammes; that is, seven or eight times as much as the former. The large hemispheres of the newly-born weigh 300 grammes, those of the adult from 1200 to 1400, that is, four or five times as much as the former. The per-centage drawn from the foregoing are these:—In the newly-born the cerebellum weighs 6 or 7 per cent., the large hemispheres 94 or 93, of the weight of the entire brain. Already after seven or twelve weeks these figures have been found to vary; the percentage of the cerebellum increasing to 9 or 11 per cent. At ten or fifteen years it has been found to be 12 or 13, nearly as much as in adults, where the percentage of the cerebellum is 12 or 14, of the large hemispheres 88 or 86.

A few other percentages are given by Huschke, viz:—Male fœtus of five months, 5·14; female fœtus of seven months, 6·05; of eight months, 7·06; new-born female, 7·32; female of three years, 12·20; male of three years, 11·91; and female of fifteen years, 12·29. The figures of Chaussier differ somewhat: the proportion of cerebellum to the large hemispheres being from 1:13 to 1:30, or from 3·23 to 7·7 per cent. The same proportions, with all the astonishing differences, have been found to exist by Gall.

The forehead of the newlyborn infant is narrow and low; the anterior lobes of the large hemispheres must consequently be expected to be proportionately small. Weighing and measuring confirm this conclusion. The anterior lobes in a prematurely born female, yielded only 16·5 per cent. of the weight of the entire large hemispheres; in the new-born, at full term, 22·09; in some who were from eight to twelve weeks old, also but from 16·7 to 18·9 per cent. This figure increases to 22·4 in the first twelvemonth. Whenever a similar figure, for instance 21·8 at seventy-seven years, occurs at advanced ages, circumstances must be peculiarly unfavorable. The remaining, especially the parietal portion of the large hemispheres, must necessarily show the reverse proportion. You remember the figures I gave for the frontal and parietal vertebræ. Now, the anterior lobes of the large hemispheres in the newly-born, weigh from 60 to 70 grammes; in the adult 300—that is five times as much as in the former; the remaining parietal and inter-parietal portion, however, in the newly-born 250, in the adult 1000 grammes, that is four times as much as in the former.

Ophthalmia.—The new species of ophthalmia which startled the French physicians a few weeks ago in the garrison of Vincennes, is more extensively spread than was at first supposed. The soldiers, whose optic nerves become paralysed the moment the sun goes down, are not to be found in that locality alone. The disease has appeared with great virulence at Strasburg and other places, and has much embarrassed the faculty. Perfect vision returns in the morning, but at sunset the patients again lose their sight. The most searching investigation is being made as to its cause and cure.—*Lancet.*

Dr. A. E. Stocker, late Medical Director of Gen. McCall's division, is appointed physician to the Berkeley Estate Hospital.

Original Communications.

CASES IN SURGERY.

By HOMER O. HITCHCOCK, M.D.

OF KALAMAZOO, MICH.

CARIES OF OCCIPUT AND TEMPORAL BONES—OPERATION—ENTIRE RECOVERY.

Case I.—On the 30th of April, 1860, R. M., a man of 60 years of age, but of strong and vigorous constitution, and uniformly good health, came to my office, suffering with very severe pain in the right side of the head, particularly just behind the ear. On examination I found some fulness, redness, and slight tenderness over and behind the mastoid process. The pain was not throbbing, but sharp, lancinating, and paroxysmal. Four or five days before, he had consciously contracted a severe cold, on which this pain supervened. I prescribed for the neuralgia, expressing my fears at the same time that there might follow suppuration, and suggesting, if he should not soon experience relief, that I should see him at his house and apply leeches. I saw no more of him. He had fallen into other hands.

Eight weeks after, he came again to my office. He appeared much worn out by intense suffering and sleepless nights. For all this time his treatment had been poultices, superficial openings, and anodynes, with no benefit, and scarcely a minute's relief from pain.

He now begged of me to *do something* for him. I reluctantly consented to take the case, insisting, however, upon a consultation, as I found on a slight examination a much deeper seated disease than I at first apprehended. The probe could be passed into a circuitous fistula just behind the mastoid, downwards and inwards nearly two inches, impinging upon denuded bone. One free, straight opening down to the bone was now made, followed by considerable relief to the patient. Within a week, however, the terribly severe neuralgia came on again, with loss of appetite and difficult deglutition. A further and more complete operation was now proposed and accepted. The complexus, the rectus posticus major and obliquus superior muscles were severed very near their attachments, and a surface of one to one and a half inches in diameter was found carious. By a suitable instrument we endeavored to scrape off all the diseased surface that could be reached with safety. The disease appeared to extend under and behind the mastoid process, and to have already affected some of the pharyngeal muscles. Just underneath the obliquus superior the disease appeared to have extended entirely through the occiput, and its whole thickness was removed. I feared after all that far under the mastoid process there was some part of the diseased bone unremoved, but on account of the condition of my patient, a further prosecution of the operation was not deemed advisable. The wound was kept well open and thoroughly syringed. The neuralgia was greatly relieved, but my patient suffered severely from a post-pharyngeal abscess. After this had discharged his power of deglutition increased, as well as his appetite, and he slowly but constantly improved. The wound was not closed for many months; but has now, two years after the operation, entirely closed, and has been so for a year, and the patient has entirely recovered, except a little stiffness of the neck.

CALCULUS—LATERAL LITHOTOMY—CURE.

Case II.—J. K., æt. 38, a carpenter, and otherwise healthy, was born and lived in the State of New York, for twenty years or more. At the age of sixteen, he received a very severe blow across the abdomen, just above the pubes. The accident was followed by the passage of bloody urine for several days. After two months, the patient seemed to have fully recovered from the effects of the accident.

During the year 1850, having lived some time in this state, he experienced difficulty and frequency in urinating; the act once in a while being followed by a bloody matter. This was accompanied by a pain and soreness just above the pubes at the seat of the injury of ten or eleven years before. These symptoms have continued gradually increasing ever since, relieved now and then by treatment, usually the use of alkalies in infusions of buchu or uva ursi. His case first came under my notice about the first of January, 1861. The presence of a calculus was at once suspected, but could not be detected. He was treated palliatively by anodyne injections into the bladder, and diluent diuretics. In April, the presence of a calculus was clearly established, and lithotomy proposed and accepted. The lateral section was performed with very slight loss of blood. There were two calculi of the ammoniaco-magnesian variety, the larger about three-quarters of an inch in diameter and of the shape of a mulberry—the smaller was broken into fragments The wound rapidly healed, and the patient was dismissed and sent to his home on the 24th day. The venerable Dr. Pitcher, of Detroit, present at the operation, remarked that it was the fifth operation for stone that had occurred in Michigan.

COMPLETE PROLAPSUS UTERI, OF TWENTY YEARS' STANDING—GREATLY BENEFITED BY EPISORAPHIA.

Case III.—In December, 1860, Mrs. Y. S. placed herself under my treatment. Her story was briefly this:—For twenty years she had been an intense sufferer from falling of the womb. Such had been the effect of the disease upon her as to have nearly ruined her nervous system, and to have rendered her a fit subject for an insane asylum. She had been treated by many physicians; had tried pessaries of all descriptions, but at the hands of no physician had she received permanent benefit, and no pessary had been found that would for an hour remain in place.

Her last doctor, before consulting myself, was an itinerant quack, with "supporters" of his own "patent," and, as he claimed, with a knowledge of such diseases and a power to cure them, far superior to any regularly educated physician. He claimed to cure them upon a new plan and according to new principles, developed and still held secret by himself. His plan was to replace the prolapsed organs with his hand and hold them up for an hour or two each day, advising in the interval the use of cool astringent injections; a plan new or peculiar to him only in the length of time the hand was kept within the vagina.

The patient, at the age of 22, had been delivered of a child at full term, after a very severe and protracted labor. The perineum was ruptured to the verge of the anus, and from that time began her sufferings. She had since been once or twice pregnant, the fœtus being developed to about five months, the fundus of the uterus remaining meanwhile within the pelvis, the cervix protruding from the vulva.

On my first examination I found suspended between the thighs of my patient a tumor of nearly the size of a goose's egg, covered with an entirely dry, smooth, and non-sensitive membrane. At the lower part of the tumor was the os uteri, into which I could easily pass, for an inch, my little finger. The fundus of the bladder and also a large portion of the rectum had been dragged down by the constant weight of the uterus, and they formed a part of the tumor. The bladder and rectum could neither of them be emptied without the whole tumor being first reduced and held up with the hand. The upright position and walking could only be endured, the organs being sustained as much as possible by a T bandage, which had always to be worn. Such had been her life for more than twenty years.

After a careful consideration of her case, I proposed, 1st, the operation noticed in Churchill's Diseases of Women, called episoraphia; 2d, as subservient to the permanent benefit of the first operation, I proposed to mend the ruptured perineum. Accordingly I dissected out an oval or pear-shaped piece of mucous membrane from the anterior wall of the vagina, three inches in length by an inch and

three-quarters in width, extending from within half an inch of the os uteri to about the same or a little less distance from the meatus urinarius. There was no considerable hæmorrhage. The edges of the wound were carefully drawn together by silver sutures, commencing at the cervix uteri. I used a great number of them, and drew the edges very carefully together. Three or four days after some of the sutures sloughed, and I had to put the lead clamps on. There was no other untoward symptom, and in ten days I had the great pleasure to find the edges completely united throughout the whole extent of the wound. And what was very satisfactory, there seemed but very little inclination of the organs to prolapse.

Two weeks and a half after the operation, my patient could be about the house with greater ease and comfort than she had experienced for fifteen years. The bladder was now wholly and naturally evacuated, and injections into the bowel could now be retained, and they would easily move the bowels. One week after I made the subsequent operation of mending the perineum, which was very successful. It was found that a hard rubber pessary now sustained the organs a little higher, and it was consequently inserted.

My patient was called too quickly away to attend upon her husband in his last illness. Could she have remained longer under treatment, and with proper care, she would have been perfectly relieved.

The great relief and benefit to her nervous system were almost wonderful. I have seen her several times since the operation. The relief continues, although she has taxed her energies far more severely than she ought to have done. She looks forward now to a comparatively comfortable old age.

I should have mentioned in its proper connexion, the fact that for some months before the operation she had ceased to menstruate. Two or three weeks after the second operation she menstruated naturally, and has done so several times since.

I have reported this case, as I do not remember to have noticed an account of this operation for this distressing condition in any of our journals. It is also spoken of by Dr. Churchill as rather rare. I send it to your excellent journal in hopes that from it some professional brother may receive a hint that shall enable him to relieve some great sufferer. And as Dr. Churchill speaks of three sutures being sufficient in the operation, I cannot refrain from warning any one who attempts the operation not to trust to so few. I am sure the completeness of the success depends largely upon the number of the sutures, and the care with which the edges are coaptated.

July 10, 1862.

CASES

TO SERVE IN THE HISTORY OF THE RELATION WHICH EXISTS BETWEEN

PUERPERAL FEVER AND EPIDEMIC ERYSIPELAS.

By M. PIHAN-DUFEILLAY,

INTERNE DES HOPITAUX, MEMBER OF THE SOCIETES D'ANTHROPOLOGIE, ANATOMIQUE-MEDICALE D'OBSERVATION.

[Translated from the French of the Union Medicale, by Dr. P. F. C. Deslandes, of New York.]

"I HAVE said that I did not consider it impossible in an epidemic for puerperal fever and surgical fever to be caught spontaneously and without previous lesion, like other specific diseases which form the third class of these affections." —(*M. Trousseau, Discussion at the Academy of Medicine, on Puerperal Fever, Session of the 14th of May*, 1858.) Now, among the diseases which compose this third category, Professor Trousseau, from whom we borrow these words, places erysipelas, the intimate relation of which with puerperal diseases he has more than once had the opportunity of appreciating. This view of erysipelas, and this bringing under one and the same etiology two affections whose appearances are so contrary, which rage under such peculiar circumstances, and whose predominant symptoms seem so distinct, is not yet adopted by the majority of physicians. Trusting to differences which are perhaps more specious than real, they refuse to admit the identity of the origin of puerperal fever and certain epidemics of erysipelas, and to-day the majority of pathologists consider still these two manifestations of one and the same cause as two peculiar marked species, the admixture and community of origin of which they deny. This line of demarcation which they try to maintain between traumatic erysipelas, which devastates surgical wards, and puerperal fever which devastates *maternit s*, must still more separate epidemics of puerperal fever from epidemics of erysipelas, making its appearauce in vigorous subjects, enjoying perfect health, and to which the name of spontaneous may be given in opposition to the preceding. The condition inherent to delivery, the modifications which women undergo during parturition, the peculiar characteristics which distinguish puerperal fever, are as many reasons which appear sufficient to deny any resemblance between the two diseases which appear, the one in the circumstances we have just observed, the other in subjects placed in quite opposite conditions, and with symptoms peculiar to it, and not less constant than those of the preceding. There are, however, circumstances in which we see those two diseases come near to each other, in which the morbid phenomena are confounded, and the same miasma, the same cause seems to engender two manifestations identical in their nature and their general symptoms, manifestations which differ only in certain of their secondary characteristics, and in which it is difficult not to recognise at least the community of origin.

But if the question of identity gives still rise to so much opposition, it is not so with that of coincidence, which is now solved for the majority of surgeons.

For them it is evident that under the influence of special atmospheric conditions or any other general unknown cause, there appear at the same time epidemics of puerperal fever in the *maternités*, and epidemics of erysipelas in surgical wards (see the curious thesis of M. Mason, Paris, 1849).

The simultaneousness of the apparition, the march and development of these two diseases, if it was only met rarely, might pass for a simple and singular coincidence; but its constancy gives it quite another value, and leads naturally to admit the existence of one and the same cause, the effects of which, however, are modified by conditions peculiar to the subjects submitted to their action. In this hypothesis, two diseases, apparently very distinct, would recognise one and the same origin, would consequently be of the same nature, would offer the same general symptoms, and differ only by secondary lesions and phenomena; these, in proportion to their intensity and the reactions which are proper to them, modify the aspect of the disease, mask partly its essential general character, which remains unperceived or mistaken, and lead to the division into two distinct nosological families, of two diseases, which are the oftener but two varieties, or at most two species of the same genus. This separating two diseases of the same kind is a result of that analysis of the least details in which, for long years, physicians have sought for a guide to nosology and treatment. To-day taking advantage of the knowledge our epoch has derived from this mode of study, and this exaggerated subdivision, we must try to collect what our predecessors had been obliged to separate, and make the synthesis of all the morbid varieties they have taught us to recognise. It is for this purpose that we shall mention here the most curious facts of an epidemic of erysipelas, which attacked women in perfect health, almost immediately after their passage into a room infected by puerperal fever.

During the second half of January and the first half of February of this year, puerperal fever raged with an extreme violence in the lying-in wards of the Hospital St.

Louis. This service presents, however, excellent hygienic conditions; repaired a short time ago, it is well aired, having numerous windows to the north, the south, and east, isolated from the other buildings, and composed mostly of separate rooms containing only two beds each; the space reserved to each patient is more than sufficient to prevent any crowding. However, the epidemic made such progress that Dr. Hardy was obliged to interdict the admission of any new women. A good many of those already confined in the ward died, and a few were able to leave after some slight symptoms. In a word, the service was evacuated in a few days, with the exception of six women still suffering from serious puerperal symptoms, and who were placed in the small rooms, while the ward underwent cleaning, and the bedding was partly changed. This took place from the 20th to the 25th of February. The large number of women in labor who daily come to the Hospital St. Louis were permitted to close the *service d'accouchements*. M. Hardy had the fortunate idea to give to the lying-in-women one of his rooms usually destined for women affected with diseases of the skin, and situated in a part of the hospital remote from the pavilion of the *maternité*. The latter having been dried for a few days, thirty-two patients affected with diverse skin disease were transferred in it from the 8th to the 12th of March, and as their removal took place from the Salle Henri IV. to the Salle St. Ferdinand, they were replaced by lying-in women who came from the outside. These filled the thirty-two vacant beds at Henri IV., from the 4th to the 11th of March, and notwithstanding the apparently unfavorable conditions of this new ward, low room, with stone ceiling, dark, badly aired, almost entirely deprived of isolation, the epidemic was cut short in its march. While a few days before almost all the lying-in women were attacked at St. Ferdinand, many died, and those who survived had a long and painful convalescence after labor. The subjects admitted at Henri IV. experienced no accidents of any kind. Their labor was natural, and it was only a month later that for the first time in that room, two lying-in women died. They had successively occupied the same bed, and both had been submitted, the first in town, before their admission, and the other in the Hospital, to painful obstetrical manipulations.

But at the same time that the sudden and complete cessation of an epidemic extremely intense marked the passage of the women delivered into the salle Henri IV., the removal into the ward infected by the miasma of puerperal fever of the women affected with diseases of the skin, was becoming the origin of a grave epidemic of erysipelas, which may well be called spontaneous; it attacked indifferently all subjects, whatever their strength, energy, and power of resistance, the previous condition of their health, the nature of the cutaneous disease which had brought them to the hospital, roseola, syphilitic papula, accidental erythema, herpes circinnatus, etc.

The diseases had not the same gravity in all cases, or at least the erysipelas did not manifest itself in all the patients with the same degree of intensity. As in the most part of epidemics, the first attacked presented the gravest symptoms. We will therefore confine ourselves to relate the history of the three first subjects in whom the affection developed itself with an extreme vigor, adding that the other cases of erysipelas we observed, apart from their intensity and duration, presented the same characteristics, the same march of the eruption, and the same symptoms.

Case I.—The first case we shall mention is that of a woman, twenty years old, under treatment in the salle Henri IV. for discrete syphilitic papulæ, and who was transferred, a few days before her cure was complete, to No. 10 of the salle St. Ferdinand. This woman enjoyed at that time very good health; was possessed of a robust appetite, and put under a mercurial treatment, which, notwithstanding its short duration, had produced a very marked amelioration. To all appearances she might have left the hospital in a few days, perfectly cured of the disease which had brought her there. The mucous membrane of the mouth had undergone no alteration under the influence of the specific medication administered by M. Hardy, with great prudence; the voice was clear, and its tone normal. The patient who had only incipient secondary symptoms did not complain of any pain either in the pharynx, the larynx, or velum palati. The last menstrual period had made its appearance normally, and the flow of blood had ceased for eight days.

It was in these conditions that this woman left the salle Henri IV. where, at that time, there existed no germ of erysipelas, to pass into the salle St. Ferdinand, seven days after the evacuation of that room by the lying-in women.

During the first days of her sojourn there nothing abnormal made its appearance; it was only the fifth day (17th of March) that she felt a slight chill with malaise, extreme lassitude, cephalalgia, and intense fever. This attack, which nothing explained, ended on the morning of the 17th, and we thought we had had to deal only with an ephemeral fever without any gravity, when a second attack more violent than the first supervened in the evening, presenting amongst other peculiarities a well marked and well localized pain in the cervical and sub-maxillary ganglions. An attentive examination of the different organs revealed to us no lesion that might explain this fever, and we were reduced to suppose they were intermittent attacks, reserving the diagnosis as regards an erysipelas which the pain on pres ure led us to fear as well as the *empâtement* and tumefaction of the sub-maxillary ganglions.

The next day (19th) our fears were confirmed, and we saw an erysipelatous redness, developed during the night, occupying all the root of the nose, and extending towards the forehead.

The day passed without anything peculiar; the patient was rather depressed, the pulse was at 110, some diarrhœa had supervened during the day, the erysipelas extended.

The night of the 19th to the 20th was painful; the patient became delirious, and the 21st in the morning presented the following appearance: The face, ears, and a great portion of the scalp, were affected with erysipelas; the tumefaction was enormous. Notwithstanding the few cerebral symptoms which we have mentioned, and which, in subacute affections, coincide most generally with constipation, the diarrhœa had increased. The fæces were brownish, very liquid, of a fœtid odor. During the few hours' interval between the morning and evening visit, the patient fell into a state of prostration which made very rapid progress. The pulse was feeble, and disappeared under the pressure of the finger; presented some intermissions, and beat 120 pulsations a minute. The skin was dry and burning to the touch; the ganglions of the neck were very painful, swollen, and their development under the jaw prevented the patient from opening her mouth easily. The inflammation, seated on the cutaneous fold of the lips, had probably gained the mucous membrane; however it be, the patient complained of heat and dryness of the mouth, and of difficulty in swallowing; an examination showed the velum palati tumefied, and of a deep red; the tongue, red at the edges, was dry and rugose in the middle. No nausea, and the delirium of the night disappeared with the day.

On the 21st the prostration had increased, the night was calm and without delirium. The pulse, extremely weak and depressible was at 114, and more and more intermittent. The erysipelatous eruption remained stationary. The laryngo-pharyngeal pain had increased, and it was with extreme difficulty that the patient opened her mouth, and that we could ascertain the presence of a kind of whitish substance lining the back part of the mouth, without our being able to ascertain whether it was a pultaceous or diphtheritic membrane, or a simple concretion of mucus. No nausea, but the diarrhœa continued the same.

22.—The prostration was on the increase, the patient extremely feeble, with a complete resolution of the limbs; during the day the intellect was perfectly clear, notwithstanding a slight nocturnal sub-delirium; the answers were

prompt and correct, but only by gestures or some sounds articulated with difficulty and very low. The laryngeal pain persisted. The erysipelas had ceased to extend, and the tumefaction of the parts first invaded was on the decrease. The pulse was at 130, with the same characteristics as the day before. To sum up; the inflammatory symptoms were decreasing whilst the general symptoms aggravated.

By the 22d, the desquamation had begun; the diarrhœa was very intense. The mouth, opened with much pain, showed the same alterations already mentioned of the mucous membrane of the velum palati. The white coating persisted, but seemed soft and pultaceous; the tongue was dry and rugose, covered with a rather shiny coat. The respiration was frequent, but neither whistling nor laryngeal; however, the patient suffered from a real and fatiguing dyspnœa, although the respiration and expiration were free; the thoracic organs revealed no morbid symptom. The abdomen was rather tumefied and painful on pressure; the pulse was hardly perceptible, and its beats could hardly be counted.

These symptoms aggravated rapidly; in the evening we found them present as in the morning, but intenser; the intellect was unimpaired. Patient died in the night of the 23d to the 24th of March.

Post-mortem, made thirty-four hours after death.—*Rigor mortis* completely absent, notwithstanding a cold temperature. The opening of the cranium revealed a rather small congestion of the venous plexus, and of the vessels that surrounded the cerebral mass; no obstruction of the sinuses; the membranes were normal; the encephalic mass had its usual consistency presenting — some congestive marks. The thoracic organs were perfectly healthy (heart, lungs, pleural cavity). On opening the abdomen we found the peritoneum slightly injected; the portion of serous membrane which lines the pelvis and is reflected on the anterior abdominal parietes presented numerous vascular striæ. The liver, kidneys, and uterus were healthy. The spleen was very voluminous, and its tissue softer. The intestinal tube was quite intact; the small and the large intestine presented neither redness, nor vascularities, nor ulcerations. The mucous membrane of the mouth was normal, except on the uvula and the anterior pillars of the velum palati, where there was a little œdema. The tonsils were not enlarged. The larynx was removed with the trachea and the œsophagus. The latter was healthy. As to the larynx, it offered a very superficial exulceration of the two superior vocal cords; the bottom was reddish, and the edges formed inasensibly a continuation of the congested mucous membrane. The aryteno-epiglottic ligaments were entirely destroyed and reduced to a greyish putrilage. The lesion was limited to the mucous membrane, and had not reached the cartilages below which it stretches. Lastly, the blood was dark, coagulated in soft clots which easily fell in deliquium.

To the first case we shall add two others whose symptoms were almost as serious, although they ended favorably; we will only record their principal features, not to tire the reader with useless details.

(To be Continued.)

INSANITY FOLLOWING INJURY OF HEAD.

OPERATION.—DEATH.

By JNO. B. CHAPIN, M.D.,

BRIGHAM HALL, CANANDAIGUA, N. Y.

B., aged 24, farmer, was admitted July 27, 1860. At the age of fourteen he received a kick from a horse, producing a compound fracture of frontal bone. Some loose fragments were removed. There remained, however, a depression of bone, visible to the eye, running in direction of a line from right frontal eminence to left superciliary ridge, deep enough to receive a finger. The remote effect of the injury was to produce an alteration in character of patient. He became irritable, excitable, and eccentric. He used tobacco to excess, and occasionally drank to intoxication. Notwithstanding his affliction, he was a person of fair capacity, and performed his duties intelligently.

Eight years ago he had an attack of insanity, lasting six weeks. Two years ago he had a second attack, lasting a few weeks. Present attack commenced three weeks prior to admission, since which time patient has been in a state of excitement, sleeplessness, disposed to wander from home during the day and night with no apparent object.

After admission of patient he continued in much the same state; declaimed in a loud and turbulent manner; had delusions of a religious character; was noisy at night. There was no considerable disturbance of physical health. The circulation was irregular, and during paroxysms of excitement face became congested. The form of disease was that usually described as paroxysmal mania.

Under the quiet of the house, and with the use of anodynes (hyoscyamus and warm bath), patient became calm, improved in physical health, slept well, and conversed properly and rationally.

On the 19th of October he was removed for the purpose of having an operation, which had been determined upon by the friends, performed with a hope of permanent improvement or relief.

A brother, a physician, informed us by letter that the operation of trephining was performed over the depression. The membranes were attached by firm adhesions to the depressed bone. Reaction was not established until three days after, when it appeared suddenly and violently, lasting twenty-four hours, during which time patient could not be kept in bed, but walked about the house. He passed into a comatose condition, and died five days after the operation. There was no post-mortem examination. The dura mater, which was thickened, was accidentally opened, and two or three ounces of effused fluid escaped.

Cases of this character are not of frequent occurrence, yet they are met with from time to time. We have at the present time under our care a case closely analogous to the one reported above in the location and extent of the injury. The patient has epileptiform convulsions; a propensity for intoxicating drink; a passionate, impulsive, and dangerous disposition. The propriety of an operation is a question of frequent recurrence with the friends of such patients, from the fact of their distressing condition, and that the cause of it is visible. In the case in question, and in similar instances, we should decide after answering two inquiries:—

First. Are the adhesions between the depressed bone and membranes so firm as to admit a separation only at serious risk of injury to them?

Second. Did the accident probably produce such extensive injury of the membranes, or brain substance, as to bring about a permanent alteration of the healthy condition of the circulation, or of the nutrition of the brain?

If these inquiries are settled affirmatively, while no improvement will follow an operation, the patient's life still will be jeopardized by the succeeding excitement and reaction which are among the hazards to be encountered.

Rokitansky and the Vienna School.—For the last twenty-five years has Professor Rokitansky thrown brilliancy upon the Vienna school, by his well known pathological investigations. It would appear that the dead-house attached to the general hospital was quite inadequate to the Professor's labors; but, undismayed by this circumstance, Rokitansky has continued for many years to pursue his valuable researches. Government at last perceived that some improvement in the building just alluded to was imperatively called for, and a very appropriate house was ordered to be constructed. On the 25th ult., this was inaugurated with great pomp, Rokitansky being, of course, the cynosure of the ceremony. The subject of his speech was "Liberty in scientific researches." The Professor has lost none of his powers, and bids fair to render, for a long time to come, valuable services to medical science.—*Lancet.*

Reports of Hospitals.

HOSPITAL SHIP EUTERPE.

HOSPITAL CONSTRUCTION—FEVER OF THE PENINSULA—EFFECTS OF MINERAL WATERS.—AMPUTATIONS, ETC., ETC.

The numerous transport vessels in the employ of the Government and of the Sanitary Commission, are now all in active service, and are accomplishing the work of caring for the sick and wounded in a manner that does credit to all concerned. The numerous difficulties which were presented during the first part of the campaign are now being rapidly removed, and the whole is reduced to a system which allows for the greatest expedition in transportation and hospital provision. The vessels themselves have been greatly improved in construction; more care being taken against over-crowding and ill-ventilation than formerly. These improvements are such, however, as could only be taught by experience, and the hospital ships St. Mark and Euterpe can safely be said to represent the greatest advantages which are at present combined in any one of the vessels. The St. Mark being the first of these that was fitted out for the hospital service proper, the Euterpe is much more perfect in its detail arrangement. The middle deck is the only part of the ship which is fitted up into wards, and there are accommodations for about two hundred and fifty patients. The bunks are arranged on standees, after the manner of shelves, three deep, which arrangement is necessary in order to economize space. Besides these bunks, there are numerous iron cots intended for those severe cases which require extraordinary care in dressing, and which could not otherwise be well seen to. The ceiling is much higher than that of the St. Mark, and thorough ventilation is constantly kept up by tubular ventilators placed at suitable distances, and also by three or four large windsails. The water-closets are portable, and are so arranged that not the least effluvium escapes from them after they have been used. An operating table is also provided under the main hatch, but when in use is screened from the view of the patients in the vicinity by means of a curtain arrangement. Intended as it was for a floating hospital, nothing is wanting in its construction and adaptability to make it suit its purpose.

It is under the Medical directorship of Dr. J. King Merritt, with the following staff of surgeons :—Drs. George F. Shrady, Bradford L. B. Baylies, and J. B. Ponce De Leon.

The Euterpe left this city on the 3d of July last for Fortress Monroe, where she remained for a fortnight, and returned on the 22d inst., with two hundred and thirty sick and wounded.

The number of cases of fever was considerable, and afforded an opportunity for the study of some of its characters. Though resembling typhoid in its general phenomena, it is evidently an altogether different disease. It seems to partake of the malarial character entirely, and yields readily to quinine and stimulation. This fever, owing to the great amount of difference in opinion as to its precise character, has received a multitude of distinctive names. At first typhoid fever was the term used in preference to all others, and not a few are yet to be found who still hold to that opinion. Others rightly consider it malarial, while others still dodge between the two points of committal by calling it the "fever of exhaustion." This discrepancy of opinion, as regards the use of a particular name for a particular disease, is constantly seen in the most amusing light in the reports of different medical officers in the same localities. One believes in nothing but typhoid, another writes everything remittent, while another has opposite the name of his patient the strangely incomprehensible term, "fever of exhaustion." All, however, seem to agree in the matter of treatment, viz. quinine and stimulants, and as far as any practical result is concerned it matters but little, for the present, at least, what name the disease goes by. Post-mortem examinations in sufficient numbers are the only means which we will have of settling the question. The fever is peculiar in many respects, and as those peculiarities are more and more studied, so will the significance of each be determined. Until then, in order that there should be a degree of uniformity in the name, at the same time that the pathological character of disease be not expressed, the term "fever of the peninsula" seems open to the least objection. A calm and thorough investigation of the fever, by army officers, cannot be expected, considering the, so to speak, wholesale manner in which they are compelled to treat the disease; but as our metropolitan hospitals are being filled with it, and as the patients promise to be a sufficient length of time under observation, we may soon hope to receive for it a proper name.

In those cases on board the Euterpe, there was noticed a marked tendency to diarrhœa, the number of passages amounting in the average to five or six per diem; then besides this, there was present, in all the severe cases, a deep bronzed discoloration of the skin entirely distinct from the ordinary tan.

Then again, extreme lassitude was complained of; the nervous force seemed to be weighed down by the weight of the poison to such a degree as to render the person almost incapable of the slightest exertion. This element of the disease was graphically described by Dr. Cuyler, in an allusion to the case of one of our generals, who, when in health, was remarkable for his activity. The general, in describing his feelings to the doctor, said: "Doctor, I am very thirsty; I am almost dying with thirst; there is the water which has been within my reach this last half hour, and I have not had the energy to stretch out my hand to take it!" The diarrhœa was easily checked by mild astringents. Almost all the cases required quinine and stimulants.

At the suggestion of Dr. Hanbury Smith, a quantity of bottled Kissingen and Pyrmont water was taken from New York, the former to serve as a mild laxative, the latter as a vehicle for stimulants. Both these mineral waters were tried, and answered very well. Dr. Shrady, who used them most, expresses himself very well satisfied, especially with the Pyrmont. The stimulant, either whiskey or brandy, was quickly added in suitable quantity to the water, and the whole was taken during effervescence. The draught was very agreeable to most of the patients, and the carbonic acid which was given off, rendered it particularly grateful to those whose stomachs were irritable. Of course, the trial was not a sufficiently extended one to warrant a recommendation for universal adoption, but the temporary good effects are certainly good enough to call the attention of the profession to the point. The Kissingen, given early in the morning on an empty stomach, acted very kindly, and was used in all those cases requiring a laxative.

The wounds were various, both as regards their extent and situation; but most commonly they were confined to the lower extremities. It was rather remarkable to notice quite a number of cases, in which the ball entered the thigh about the junction of the middle and lower thirds, passing through the limb without injuring the femur, or any important blood-vessel. In two or three instances of this sort, both thighs were wounded in the same way. The wounds were nearly all made by the minié ball, and were slow to heal. There was the usual percentage of compound fractures of the thigh and leg.

Those patients who had suffered amputation of the thigh or leg were pretty badly off. In most cases, either there was an insufficiency of flap, or the granulating surfaces were covered with slough. Very few of the stumps looked shapely.

The City of Louisville, Ky., requires the Professors in the Medical College to take the oath of allegiance.

Reports of Societies.

MEDICAL AND SURGICAL SOCIETY.

DR. T. M. HALSTED IN THE CHAIR.

MEDICAL AND SURGICAL CASES.

STATED MEETING, May 4, 1861.

ACUTE CHOREA TREATED WITH WHISKEY.

DR. CLARK related a case of acute chorea which was interesting from the illustration it afforded of the good effects of what he believed to be an entirely novel treatment in that disease. A girl, sixteen years of age, was admitted recently to Bellevue Hospital suffering from an aggravated form of chorea of four weeks' duration. The convulsive movements were so violent and incessant that she had not slept for four or five nights previous to the admission. Dr. Clark having observed the sedative effects of whiskey administered in intoxicating doses in some cases of idiopathic tetanus, determined to try the same remedy in this case. He directed that half an ounce of whiskey should be given to the patient every half hour until intoxication was produced if necessary and sleep followed. After the third dose the girl slept half an hour, after the fourth dose she slept three hours, and from this time she slept well with doses repeated at longer intervals, and subsequently with the use of tonics has improved rapidly. There were no symptoms of heart disease in this case, and there had been no previous rheumatism of the joints.

RAPID ACCUMULATION IN HYDROCELE.

DR. POST referred to a case of hydrocele which was remarkable for the large accumulation of fluid (eight ounces) that had taken place in three weeks. It was also somewhat peculiar in shape, its outer posterior diameter being greater than its supero-inferior. There was also a conical appendage in front extending towards the inguinal ring.

CEPHALIC VERSION IN BROW PRESENTATION.

DR. ELLIOT, after alluding to the difficulty of cephalic version in cases of brow presentation, related a case which illustrated strikingly to his mind the difficulty of the operation. In this case he replaced the hand and arm, and succeeded with a single blade of the forceps conjoined with abdominal manipulation in converting it into a head presentation. On returning to the patient after a few hours, absence it was found that the head had slipped back, and the effort was again made by the vectis to bring down the occiput, but this time without success. Podalic version was then resorted to, the head resisting delivery either by manipulation or forceps; the labor was terminated by perforation, pulsation having ceased in the cord during arrest of the head.

DR. ELLIOT alluded to a second case to which he was called soon after the last, where he found the head and arms in the vagina and the brow presenting. The child was dead. In this case he performed craniotomy, not being able to convert it into a head presentation.

STATED MEETING, May 18, 1861.

COMPOUND FRACTURE OF SKULL.

DR. ALLIN related a case of fracture of the skull in a child one year old. The child fell from the mother's lap, producing a deep indentation near the right ear in the parietal bone. A severe convulsion occurred before the Doctor reached the child. An incision was made through the scalp over the seat of fracture, and an opening through the skull effected with a Hey's saw:—Some fragments were chipped off the edges of this opening with a probe so as to allow the introduction of a pair of forceps, by which the depressed portion of bone was raised. The child has since done well, there has been no return of convulsions.

RUPTURE OF UTERUS.

DR. ELLIOT related a case of labor to which he had been called in consultation. The woman was pregnant with her eighth child. The presentation was normal, and the labor had progressed naturally until six hours previous to Dr. Elliot's arrival, when she complained of acute abdominal pain, and labor pains suddenly and entirely ceased. There was no nausea and no hæmorrhage. The child was dead, and the placenta detached, except at one point. Dr. Elliot delivered the child. No hæmorrhage followed: the uterus contracted well, and no laceration was detectible. Symptoms of peritonitis ensued with coffee-ground vomiting. She died on the third day. No autopsy was obtained. Dr. Elliot was sustained by the members of the society in the opinion that there had been a rupture of the uterus.

IMPERFORATE ANUS.

DR. POST detailed a case of imperforate anus, in which he had been obliged to resort to the operation for making an artificial anus. The anus was perfect for half an inch. There had been vomiting of yellow matter previous to the operation, and the effort was first made to dissect through the septum and reach the distended gut from below. This failing, the descending colon was exposed in the left lumbar region behind the peritoneum. An opening was made into the gut, and the edges of the opening were attached by sutures to the skin. The meconium escaped freely for twenty-four hours after the operation. The following day erysipelas attacked the wound, extending to the genitals, also erysipelas of the face, and the child died.

ABSCESS OF LUMBAR REGION OPENING INTO BLADDER.

DR. POST related also a case of abscess occurring in the lumbar region, and finally opening into the bladder. The woman was attacked some weeks since with violent pains in the right lumbar region, which were supposed to be due to the passage of a renal calculus; soon afterwards the side began to swell posteriorly and in front between the umbilicus and the ant. sup. spinous process. Suddenly the swelling subsided. Pus passed freely with the urine, and the patient is now doing well.

ANEURISM OF INTERNAL MAMMARY ARTERY.

DR. CLARK related the case of a man, æt. 45, who presented himself at the clinique four months since with a tumor in the left breast. The tumor was as large as his fist, hard, having a slight pulsation and a very feeble double murmur at the apex, and synchronous exactly with heart sounds. There was no expansive pulsation, and no pulsation between the tumor and the heart, or between the tumor and the subclavian. There was no fluctuation, but a broad base of dulness extending equally on all sides. It was supposed to be an accumulation of fluid between the pleura and ribs, or between adventitious pleuritic membranes and ribs. At the end of three weeks a conical tumor over the middle of the sternum, the tumor opened and discharged freely. The dulness was considerably diminished, but the pulsation remained, and the murmur continued. Now, after four months, during which pus has been discharged more or less freely, the distinctness of aneurismal disease of the internal mammary artery is clearly marked.

EXOSTOSIS OF DORSAL VERTEBRÆ—PRESSURE ON VESSELS, ETC.

DR. CLARK related also the case of a man who complained of pain under the first rib and clavicle of the left side, extending to the shoulder. After exertion he loses his voice. There is no pulse in the left radial nor in the subclavian outside the seat of pain. The veins of the shoulder and arm are varicose. There is no loss of sensation or motion. There is a prominence at seat of pain, hard and dull on percussion. The respiration as heard in the region of the tumor is half bronchial, and seems to be communicated. The tumor pulsates, or rather heaves; it has no expansible pulsation. Dr. Clark supposes the exist-

ence of an osseous growth from second dorsal vertebræ causing pressure on the vessels, and on inf. laryngeal nerve.

Dr. Parker alluded to a case of supposed aneurism of the int. mam. artery which was sent to this city from the country for consultation. It was finally determined to be aortic, and so proved at death. Dr. Parker also alluded to a case of excavation of the first rib, occurring in a young lady, sixteen years of age. It reached above the edge of the clavicle, and stretched over it to the artery, vein, and nerve. No interference was advised, and with the cessation of growth the tumor ceased to develop, and subsided so as to give no trouble.

Dr. Agnew related a case of subacute glaucoma in which he had performed Hancock's operation. The patient at the time of the operation could not distinguish a champagne glass. Twenty-four hours after the operation could distinguish a latch key, soon after a watch key, and at the end of a week could read ordinary type. At the New York Eye Infirmary Hancock's operation is preferred to Graefe's as avoiding deformity.

American Medical Times.

SATURDAY, AUGUST 2, 1862.

THE GRAND ARMY.

One year ago we placed at the head of an editorial article the phrase, "The Profession and the Crisis." The disastrous battle of Bull Run had just been fought, the public was in a state of nervous apprehension, and alarm filled every mind. We then took occasion to allude to the duties, obligations, and responsibilities of the medical profession, and endeavored to point out how its power to remedy some of the existing and prospective evils might be applied. From the prostration which followed that memorable battle the country gradually recovered, new armies were raised, equipped, and put in the field, surpassing in numbers, physical perfection, provisions, and every article necessary to the comfort and health of the individual soldier, any army of modern times. The nation took new courage, became proud of its military strength, and finally stood ready, not only to crush all domestic combinations against its authority, but to arbitrate diplomatic questions with foreign governments on the field of battle.

One year has passed—a year of battles, of victories, of marchings and countermarchings innumerable. The country has rung unceasingly with the clash of arms. But the year has closed, as it commenced, with a great crisis. The "Grand Army" on which rested the hopes of the nation, has met with a reverse more disheartening than the defeat at Bull Run. It has failed in every particular to accomplish its object, and now lies on the inhospitable banks of James River, weak, worn, and wasted, a mere remnant, watched over and protected from the rapacious enemy by an all-powerful fleet. Again the country is aroused by official proclamations, summoning it to make a fresh draft upon its life-blood.

The past year has necessarily been replete with valuable but dearly-bought experiences to us, an unmilitary people, and it would not a little strengthen our faith in the successful issue of this struggle, if the Government would profit by them. As we are now about to renew our armies, and commence a new campaign, the occasion is profitable to consider the causes of our disasters, and the remedy.

The secret of the failure of our armies is comprised in this single word—Sickness. Study the last campaign in whatever light we may, the inevitable conclusion is that our defeats are almost solely due to sickness. Of the entire army, one hundred regiments are to-day invalided, and this represents but a fraction of the actual reduction of its physical energy and strength. The campaign on the Peninsula is a striking example of the utter failure of a large and well appointed army to accomplish its purpose, when little or no regard is paid to the prevention of disease. Within the short space of three months it is estimated that 50,000 men were sent to the rear of the "Grand Army of the Potomac." During that time it was within twelve hours' sail of the Capital, and Commissary stores were in unlimited quantities, at the command of the proper officers. The army marched less than a hundred miles through a rich farming country, but long before it reached the point for effective operations the commanding officer was obliged to ask to have his army renewed. During this time there was no prevailing epidemic, or other disease which a careful attention to the simplest laws of hygiene would not in a great degree have prevented.

Let us notice some of the more palpable causes of weakness and disease:—The first cause of weakness is due to mustering into service of unfit persons. This has been done to a most dangerous extent. Boys and old men, men suffering from herniæ, varicose veins, chest and heart diseases, etc., often passed muster without a word of objection. There are many instances of persons joining the army because their diseases incapacitated them for active business. The blame here rests with the medical inspectors appointed by the State authorities. These inspectors were in some instances utterly unfit for such duty, being unqualified to make a proper medical inspection. At one of the most important recruiting stations in the country nearly every form of disability was overlooked. In other instances the inspectors, for the smallest bribes, passed men whom they knew to be unfit for the service. An army made up of such material has, within its very earliest organization, the seeds of disaster and ultimate failure. The army of the Potomac was composed of much of this material, which was not very apparent while in camp, and subjected to no other fatigue than the daily drill. But the first decided movement diminished the number of soldiers, but not the strength of the army, by thousands. This class of persons have also filled the hospitals throughout the entire season. The first exposure to the inclemencies of the weather and to fatigue, has invalided them for the period of their enlistment.

A second palpable cause of disease has been the unhealthy location and inadequate provision of camps. There is doubtless an occasional military necessity for the location of a camp on grounds unfit for the residence of man, but this is seldom, and almost never of long duration. And yet the army of the Potomac was scarcely ever on healthy grounds, though often in the immediate vicinity of healthy localities. When it broke camp in March the troops were marched rapidly to Manasses, thence back to the Potomac, upon the banks of which they lay for three weeks waiting for preparations for the expedition to be completed. During that time they were almost within sight of their comfortable but deserted tents, with no covering other than meagre shelter

tents. As a consequence the hospitals of Alexandria and every available building were filled with soldiers suffering from rheumatism, pneumonia, pleurisy, etc. When at length the army moved to the Peninsula, the most unhealthy localities were selected. The extensive low grounds at the mouth of James river, that during the spring season are covered with pools of stagnant water, were occupied by the army. Here they remained for weeks with the same meagre tents, and the same result followed as at Alexandria. The hospitals were soon crowded with every form of disease dependent upon exposure; so excessive was the sickness that hospital tents in larger numbers were erected in the vicinity, and all were crowded. Here the Grand Army had its strength sadly reduced. Moving forward to the scene of its first operations the army sat down before Yorktown. Here the camping grounds were selected with no better care, and combined with this fertile source of disease was hard labor in the mud and cold. From this point the transports were busily engaged for weeks in conveying the sick away to distant hospitals. The depletion of the force here was so great as to excite apprehension that this army might not be able to cope with its adversary. After the evacuation of Yorktown, the army pressed on by hurried marches to the Chickahominy, where it again sat down in the very stench of malaria. The reduction of its numerical and physical strength now became frightful and alarming. It was rapidly melting away in the very face of the enemy beyond all power of recuperation. In the final struggle its commanding general required 50,000 more men than he had, but that precise number had been invalided from its ranks through gross neglect of their health and comfort.

A third cause of disease has been a disregard of camp police. Cleanliness of the grounds, and cleanliness of the person, have generally been most shamefully neglected, and the result has been diseases of the severest type. In vast numbers of regiments of the Grand Army, every form of nuisance has been allowed to accumulate on the ground and in and around the tents. In these regiments personal neatness was not even thought of. No trite apology of "military necessity" can excuse a neglect of cleanliness—the first element of health.

A fourth cause of disease has been improper and badly cooked food. The supply of food in the gross to the army has not, we believe, been deficient, except in extraordinary cases. Government has been lavish in this respect, and has not spared money to give a good supply of food. But she has allowed the most consummate knaves to make the purchases, and so fearfully have they imposed upon her confidence that the term Commissary is a by-word and a hissing in the army. Every article that could be adulterated, has been, so thoroughly, that of many articles the original cannot be detected by the senses. And yet for all these stores the Government has originally paid the highest market price. In regard to the cooking it is safe to say that the food could not well be made more unpalatable and indigestible. An hour spent at surgeon's call will convince any one of the truth of this statement; the greater number of those suffering slight indisposition complain that they "cannot keep the food on their stomachs."

These are some of the more prominent features of the medical history of the Grand Army, which our military authorities should study well before they enter on another campaign. It has very properly been suggested that the Medical Inspector should be chosen from the regular service. There can be no doubt of the necessity of this change. It will be seen that the chief causes of camp diseases are easily preventable; they grow out of the violation of some of the simplest laws of hygiene. Good camping ground can, with but an occasional exception, be selected without in the slightest degree interfering with the military plans of a commandant; tents and their necessary furniture may be preserved, as a general thing, if proper care is exercised. A disregard of camp police and personal cleanliness is an unjustifiable neglect of the plainest laws of health. The Army of the Potomac has some very marked illustrations of this fact. There are regiments which have preserved the most rigid discipline under the immediate inspection of their colonels, and the result has been that the numerical strength has been but slightly reduced by disease. In the matter of the supply of food a system should be adopted which would bring to the camp the best article in market. Cooks should be sent with the army, whose only duty is to attend to the care and preparation of the food.

We are aware that a warning voice from the medical department is more often disregarded than heeded, and yet it is the first duty of our authorities to seek its counsel. The medical history of the "Grand Army" embraces in truth all the causes, patent or concealed, of the failure of the last campaign throughout the entire country. That history it is not for us to write, but it should be written by the proper department and laid before Government. It would be a chart more valuable for the General-in-Chief in conducting the ensuing campaign, than are the maps of the coast survey to the commodore who endeavors to approach and reduce a southern seaboard town.

THE WEEK.

The protective power of vaccination is still an unsettled question. Jenner declared that he had discovered a means of rendering the person protected by it *perfectly secure* through life from the infection of small-pox. The error is now palpable; but to what extent the vaccine is protective is undecided. In view of this doubt Prof. Dickson, of Philadelphia, proposes both vaccination and inoculation in the same individual—The first being the most certain *modifier*, the second the more efficient *protective*. The failure to secure legal enactments to compel vaccination, he attributes to the opposition to innovation, and the want of confidence in the measures used. The latter objection, he thinks, would be overcome by the means proposed, and the former by the united effort of the medical profession. He says: "Let us, then, with energy, perseverance, and unanimity, recommend to all civilized governments the combined employment of these two safeguards. Let us procure that it shall be ordained, that every child shall undergo vaccination by some expert within a month after birth; that as soon as the constitution shall have gone through its influence, inoculation with variolous virus shall be performed; and that this latter operation shall be repeated again and again at brief intervals, until all reasonable satisfaction has been attained, of the entire eradication of the susceptibility to small-pox." It is encouraging to find so eminent a member of the profession pledging his efforts in behalf of compulsory protective measures against small-pox. If his earnest appeal were heeded, and the powerful influence of the profession concentrated upon this all-important object,

scarcely a year would pass before the good fruits would appear. Prof. Dickson states that he has prepared a series of ordinances, but he refrains from presenting them, as the first step to action is a "careful and deliberate consultation as to the *modus operandi*." We hope he will not let this matter rest here, but will organize a plan of action, and give it the sanction and force of his powerful influence.

—

At the outset of the War, we proposed that an appropriation should be made by Government of money for the purchase of artificial limbs for soldiers who have lost their arms and legs in service. This proposition has been entertained in Congressional circles, and it has been stated that an appropriation was actually made at the last session of Congress. Through what channel this fund is to be applied to its specific purpose we are not informed. We have recently called attention to the importance of sustaining by our patronage, those qualified members of the profession who devote themselves exclusively to the specialty of mechanical surgery. There are now thoroughly qualified medical men engaged in every branch of surgical mechanics; all real improvement must emanate from them. But every branch of this department of surgery has its pretenders, who have no shadow of claim to respectability. They hawk their wares about the streets as the merest matters of merchandise, endeavoring to attract attention by all the shallow devices of mountebanks. If Government place a fund at the disposal of any authority for the purchase of artificial limbs for soldiers, we hope no part of it will be diverted to the pockets of these arrant quacks. Pretensions of patriotism, and distressing sympathy for our brave volunteers, and similar appeals, should be regarded as *primâ facie* evidence of incompetency.

—

The recent act (on another page) abolishing the office of Brigade Surgeon is, we learn, not well received by this class of medical officers. The position which they have hitherto occupied has been dignified, and the duties for the most part administrative. Many have been made medical directors, others have been placed in charge of important hospitals, and still others have been appointed medical purveyors. The change in the law does not, we believe, contemplate any special change in the duties of the Brigade Surgeon. It merely removes him from the supposed necessary connexion with a brigade, and places him more immediately under the direction of the Surgeon-General. He now becomes a Surgeon of volunteers, an honorable rank, and one that entitles him to all the consideration which he enjoyed in his former position.

—

In the series of sanguinary battles before Richmond we have yet to learn that a single surgeon failed to do his duty. On the contrary, we have the most undoubted evidences of courage and heroism in the hour of greatest peril. Many continued their ministrations to the wounded under the hottest fire, and left them only after the most positive orders from superior officers. A large number volunteered to remain, and give themselves up as prisoners with their wounded, for the privilege of continuing their care of them. As soon as the army rested upon James river innumerable recommendations for promotion of officers of the line, commissioned and non-commissioned, for bravery, were sent to Washington, and promptly ordered. But no surgeon is allowed to receive higher rank for meritorious conduct; his rank remains stationary. This is not just; the country has the services of some of its best surgeons, and it should reward that courage and devotion, which are displayed in the care of the wounded, with promotion.

—

In another column will be found the correspondence elicited from the officers of the Army of the Potomac on the occasion of the retirement of Dr. Tripler from the office of Medical Director. From the battle of Bull Run, to the date of the order relieving him from duty, Dr. Tripler and his brother officers seem to have harmoniously labored together in perfectiug the discipline, equipment, and general efficiency of that army, at one period so complete in all its appointments for active service. These testimonials are an honorable acknowledgment of the high regard entertained for him by his associates, and will prove as gratifying to the profession at large, as to the circle of his immediate friends.

Rebiews.

On Military and Camp Hospitals, and the Health of Troops in the Field. By L. Baudens, Medical Inspector of the French Army, etc., etc. Translated and Annotated by Franklin B. Hough, M.D., late Sanitary Inspector in the Army of the Potomac. New York: Baillière Brothers, 1862, pp. 260.

The name of Baudens has long been familiar to the student of French surgical literature. Nearly every branch of practical surgery has been enlightened by his pen. During the latter portion of his life his attention was more particularly directed to military medicine and surgery, and not the least important of his writings are on this or on kindred subjects. For ten years he was Surgeon-in-Chief of the military hospital of Val-de-Grâce. During the Crimean war he was appointed Medical Inspector to the French Army, and the present work embraces the results of his labors in this great field of observation.

The work is divided into four parts and an appendix. Part I. relates to camps; Part II. to the field hospital and medical service; Part III. to the hospitals and their diseases; and Part IV. to the return of the army.

In each division the author enters at length into a discussion of the different topics which present themselves, and gives the valuable results of his observation and experience. The location of camps, their arrangement, etc., the management of the ambulance service and the surgery of the field and hospital; the location, ventilation, and management of permanent hospitals, with a full consideration of their diseases,—these subjects, covering the whole field of military medicine and surgery, are carefully reviewed. A mind of such practical experience as that of Baudens could not be directed to this subject without educing much that will prove of permanent value to military surgery.

The style of the work is rather that of the narrative, and is very agreeable. The translation is literal, but the original is not always exactly rendered, and the English composition is often defective. The work will, however, give great satisfaction to our army surgeons, as it is full of valuable instruction in matters which daily interest them. The notes by the translator are useful.

—

A Practical Treatise on the Diseases of the Heart and Great Vessels, including the Principles of Physical Diagnosis. By Walter Haynes Walsh, M.D. A new American, from the third revised and much enlarged London edition. Philadelphia; Blanchard & Lea, 1862, pp. 420.

This work is too well known to the American physician to

require other notice than the announcement of a new and revised edition. The author thus sums up in his preface the improvements which have been made in this edition: "much new matter has been added, and the entire work in a measure remodelled. Numerous facts and discussions, more or less completely novel, will be found in the description of the principles of physical diagnosis; but the chief additions have been made in the practical portions of the book. Several affections, of which little or no account had been given in the previous editions, are now treated of in detail. Functional disorders of the heart, the frequency of which is almost rivalled by the misery they inflict, have been closely reconsidered; more especially an attempt has been made to render their essential nature clearer, and consequently their treatment more successful, by an analysis of their dynamic elements."

Correspondence.

IS IRIDECTOMY A NEW OR OLD OPERATION?

[To the Editor of the American Medical Times.]

Sir:—When I responded to the questions deferentially asked by Dr. O'Reilly in your issue of the 28th of June, I had no idea of entering into anything like a controversy. Dr. O'R. had, it seemed to me, candidly asked his questions—"with a view," I quote his own words, "to bring the subject under the discussion of persons more competent to do it justice" than himself. I considered it, therefore, due him, as well as of interest and profit to your readers generally, *to state the facts* on the most striking points of his queries. I must on this account the more regret that he should not have endeavored to understand me better before contiuuing to draw conclusions from erroneous premises.

The only rational basis of his communication of last week consists in the peculiar meaning he attaches to the two expressions "*uveal coat*" and "*optical purpose.*" If he were right in these definitions the question at issue would still admit of argument, but he does not understand or use the terms according to their scientific signification at the present day:—

First.—The uveal coat—Tunica uvea bulbi (Brüke) is the pigment stratum situated between the sclerotica and retina. It consists, therefore, *mainly of the pigment layer of the choroid*, though comprising besides this the corpus ciliare and the posterior surface of the iris.

Secondly.—The operation of irideetomy for an "*optical purpose*" can be executed in cases of *opacity of the cornea and of closure of the pupil*, in order to procure the rays of light the possibility of a contact with the retina. But (*a*) in glaucoma there always exists an enlarged pupil, and (*b*) in many cases of iritis with synechia and consecutive choroiditis, the pupil is not at all, or only partially, closed by exudations. In these cases it is obvious the patient would see, if the changes in the internal membrane did not impair vision: the operation is therefore not performed for an "*optical purpose,*" but as there *exists* a pupil, the irideetomy has a *therapeutic object: it is performed in order to change the conditions of nutrition, circulation, and pressure, in the interior of the eye.*

With these two expressions rectified, Dr. O'Reilly's logic, as "having proved that inflammation of the uveal membrane and iritis is identical," etc., etc., etc., collapses. The objective settlement of the question with which he started, i. e. as to the antiquity of irideetomy, relieves me from further dispute with him on any score.

I have nothing to add, but that my first answer will give sufficient information on the subject in order to enable every *sensible* reader to judge himself about the *details* of the controversy.

Julius Homberger, M.D.

24 West 12th street.

SURGEON CHURCHILL OF THE 14TH REG. N. Y. V.

Utica, July 18, 1862.

[To the Editor of the American Medical Times.]

Sir:—I have noticed that in a recent No. of the Times giving a list of those Surgeons who so nobly permitted themselves to be taken prisoners rather than abandon their charge, the name of Alonzo Churchill, M.D., Surgeon of the 14th Reg. N. Y. S. V., is omitted. Will you please to correct the omission? Let the name of every man who has so nobly vindicated the honor, the dignity, and humanity of the profession be put on record.

Yours, etc.

C. B. Coventry, M.D.

FOREIGN CORRESPONDENCE.

LETTER VI.

HOSPITAL FOR SICK CHILDREN.

By PROF. CHARLES A. LEE.

London, July 1, 1862.

My stay in London has been longer than I expected, in consequence of the many attractions which the city presents to a foreigner at the present time, independent of the scientific and professional advantages which it always possesses over any other European city. Among these may be mentioned the anniversary meetings of the great benevolent, religious, and philanthropic societies of Great Britain, the great International Exhibition, the Social Congress, the "Congrès de Bienfaisance," the Show of the Royal Agricultural Society, etc., etc. All these have demanded more or less attention; but at the same time I have not been neglectful of those matters more especially interesting to medical men.

Calling to mind that beautiful description of the "*Hospital for Sick Children,*" by Dickens, in his "*Household Words*" (April, 1852), and which gave the first impulse to the establishment of a similar hospital in New York, I recently wended my way to 49 Great Ormond street, where the simple announcement that I was an American physician, procured me, as it has everywhere, all the attention and civilities I could possibly desire. However politicians may feel towards us, scientific and medical men everywhere hail us as brothers, and give us the heartiest greetings. Thus the Royal Society, the Ethnological, the Medico-Chirurgical, the Obstetrical, the Microscopic, the Pathological, etc., all throw open their doors to us, and invite us to participate in their proceedings. The London "*Hospital for Sick Children,*" the first one of the kind, so far as I know, established in England, was opened in 1852, its objects being to provide for the medical and surgical treatment of poor children, to further the attainment and diffusion of knowledge regarding the diseases of children, and to aid in the training of nurses for children. The two first of these objects have been thus far very successfully accomplished. Patients laboring under any disease except small-pox are received. In the first year over 1,250, including out-patients, were treated; the report of 1862 shows that 577 were cared for within the hospital, and 10,792 treated as out-patients. The charity is free from debt, and is supported entirely by voluntary annual subscriptions. It is a gratifying fact, that although when first opened, mothers viewed the institution with distrust, they are now so eager to place their little ones within its walls, that the matron is compelled to keep a long list of patients waiting for their turn for admission. Four years ago the large house adjoining was purchased, so that there are now over fifty beds, while there is ample room for the accommodation of the nurses, the medical staff, and the establishment of an infant nursery, in which young children are taken care of, for a trifling charge, while their mothers are at work. One object in the establishment of the hospital has not yet been attained, namely, the training of female nurses. The institution, however, has been made highly

subservient to the advancement of our knowledge regarding the causes, pathology, and treatment of the diseases of children. A series of valuable lectures has been delivered by the medical officers, Drs. West and Jenner, during each winter, at the hospital, which have been well attended; and the well known able work of the former, on this class of diseases, has chiefly been the result of observations made in this institution. A "*Home*" has been established at Mitcham, and another at Brighton, for the convalescent children, auxiliary to the Child's Hospital, which are accomplishing great good. But notwithstanding the benefits resulting from this establishment, how inadequate is a single hospital of fifty-five beds, for the accommodation of the sick children of this vast metropolis! It doubtless relieves a large amount of human misery, saves many lives, and is a most valuable field for medical observation, and improving the treatment of the diseases of infancy and early childhood. But twenty such institutions are as much needed among this population of 4,000,000, as one. Although 88,969 out-patients and 2,274 in-patients were treated in the course of eight years, up to 1858, and a still larger number in proportion within the last four years, these numbers are but a tithe of the poor sick children who have perished during the same periods in this city, for the want of such care and medical aid as this asylum furnishes.

I have stated that this was the first hospital of the kind opened in Great Britain. Since then similar hospitals have been opened in Edinburgh, Liverpool, Birmingham, and other places in the kingdom; and well may they be multiplied, when we reflect that in every 50,000 persons dying yearly in England, 21,000 of them are children under ten years of age! Many essays have been written on the causes of excessive infant mortality, and great stress been laid very justly on impure air, want of proper ventilation, unhealthy food, neglect of cleanliness, etc., but too little has been said in regard to the ignorance of mothers, not only as respects the laws and conditions of health, but everything relating to nursing, and the proper management of their children when sick. Would one-half of our population perish in infancy and childhood, were parents but even partially acquainted with the laws and facts of sanitary science? It is in vain that medical science has advanced, that vaccination has been discovered, that the conditions of health are so much better understood by the faculty than they formerly were. So long as the natural guardians of the young know next to nothing of the causes of disease or the proper nursing of the sick, so long we may expect infant mortality to remain about the same, and we know it has not diminished two per cent. for the last fifty years, and has even increased in our large cities.

Children's hospitals have now been established with success in nearly twenty of the chief cities of Europe, and it has been found that they are more important to the poor as a class, than even general hospitals. The proper care of sick children requires special arrangements, and those can only be found, at least for the poor, in properly constructed hospitals. I say nothing of the tact, experience, and skill, required in the successful treatment of the diseases of young children; though no one can doubt that when studied as a specialty, this class of affections is much more successfully managed than when treated as they usually are. Dickens has very truly observed that the deaths of children are against the laws of nature; and that not against passive laws, but against the striving of every secret and mysterious power bestowed on the human baby to prevent them. What terrible abuses then must exist to cause such excessive mortality! I looked with more pleasure upon the large and pleasant rooms of this hospital, and the well cared for little patients, than any similar institution that I have ever visited. There was perfect order and neatness everywhere; thorough system in everything; the most assiduous and careful nursing; the highest medical skill always at hand; complete ventilation; pleasant sights and sounds; a beautiful garden in the rear of the dwelling; cheerful, happy faces everywhere; no wonder, that this hospital has the queen for its patron, and noblemen for its officers and board of managers.

I have singled out this establishment for particular notice, because I am satisfied from long experience and observation among the poor of New York, that several such asylums are much needed in that city. *One* children's hospital cannot supply accommodation for one-tenth or twentieth of the number that ought to be sent to such institutions. Of the tens of thousands of children treated annually by the physicians of our different dispensaries, how many more might be saved that now perish, had they the kind care and attentive nursing which would be extended to them in well managed hospitals!

Army Medical Intelligence.

CORRESPONDENCE ON THE OCCASION OF DR. TRIPLER'S WITHDRAWAL FROM THE ARMY OF THE POTOMAC.

HEADQUARTERS ARMY OF THE POTOMAC,
Camp near Harrison's Landing, July 4th, 1862.

Special Orders.

* * * * * * * *

3. Assistant Surgeon Jonathan Letterman, U. S. Army, having reported at these head-quarters, is announced as Medical Director of the Army of the Potomac, and will relieve Surgeon Charles J. Tripler, U. S. Army, who will proceed as directed by paragraph six of special orders, No. 142, of the 23d ultimo, from the War Department, Adjutant General's office. In carrying out the provisions of this order, the General Commanding cannot omit the expression of the high appreciation in which he holds the services rendered to this army by Surgeon Tripler, and of his thanks for the zeal, energy, and ability displayed by that officer in the discharge of the arduous and responsible duties of his position.

* * * * * * * * *

By command of Major-Gen'l M'Clellan.

S. WILLIAMS, Asst. Adjt. Gen.

HEADQUARTERS OF THE ARMY OF THE POTOMAC,
Harrison's Bar, July 4th, 1862.

Surgeon C. J. Tripler:—My Dear Sir:—It was with much regret and surprise that I learned you had been relieved from duty with this army, and this regret is not diminished now that the hour for your departure has arrived.

It is but a matter of duty that I should express to you my entire satisfaction with the manner in which your arduous and most important duties have been performed.

I am satisfied that every arrangement possible, under the circumstances, has been made to insure the comfort, safety, and recovery of the sick and wounded of this army; I doubt much whether any army, situated as this has been, was ever as well taken care of in these respects. I am confident also that such is the feeling of the great mass of those interested, viz. the men themselves.

I know that everything possible has been done to insure the prompt care of the wounded on the field, and their rapid and comfortable removal to the rear.

I regret to learn that some accusations have been made against you of cruelty to the sick and wounded of certain states. This charge is simply absurd, for the reason that the nature and extent of your duties rendered it impossible for you to be brought into personal contact with individual sick, or to know any distinction of states.

Regretting much that there can have been on the minds of any an impression so unfounded as that the performance of your duties has been otherwise than most creditable to yourself, and beneficial to the service,

I am, my dear sir, ever
Your sincere friend,
GEO. B. M'CLELLAN,
Maj.-Gen. Commanding.

ARMY OF THE POTOMAC,
James River, July 4th, 1862.

To Surgeon C. J. Tripler, U. S. Army:—Dear Sir:—The undersigned, officers on duty at the Head-quarters of the Army of the Potomac, desire to express to you their unfeigned regret at your separation from this army.

You were named to the office of Medical Director of the Army of the Potomac at its organization, and we bear voluntary testimony, that from that time to the present, in camp and in the field, you have displayed unremitting attention, untiring zeal, and great efficiency in making your department sufficient for the care of the vast numbers of sick and wounded which have come under your charge—and that you have done this in such a manner as to make efficient and humane provision for our suffering fellow soldiers, with the least embarrassment to the military operations of the army.

Accept, Doctor, our warmest wishes for your future welfare and happiness, and believe we shall always be deeply interested in both. With the highest consideration and respect, we remain, very truly, your friends, J. G. Barnard, Brig.-Gen. and Chief Eng., A. P.; J. Williams, Brig. Gen., Asst. Adjt.-Gen.; J. B. Sacket, Inspector-Gen. U. S. A.; G. C. Haller, Maj. 7th Inf., Comd't Gen. Head-quarters; C. P. Kingsbury, Col., Chief of Ord., A. P.; Henry J. Hunt, Col. and A. D. C., Chief Reserve Art.; A. Porter, Brig.-Gen. and Prov. Mar., A. P.; William F. Barry, Brig.-Gen., Chief of Artillery; H. B. Clarke, Col. A. D. C. and C. I.; A. A. Humphreys, Brig.-Gen. Vols., Chief of Top. Eng.; Edward H. Wright, Col. and A. D. C.; Thomas M. Key, Col. and A. D. C.; A. V. Colburn, Asst. Adjt.-Gen.; Jas. A. Hardie, Lt.-Col., A. D. C.; Edw. McK. Hudson, Lt.-Col., A. D. C.; H. Hammerstein, Major, A. D. C.; Rich'd B. Irwin, Capt., A. D. C.; Arthur M'Clellan, Capt. and A. D. C.; Albert J. Myer, Signal Officer, U. S. A.; Alex. J. Webb, Major, R. I. A., Capt. U. S. A.; N. H. Davis, Asst. Inspec.-Gen., U. S. A.; Wm. T. Biddle, Capt. and A. D. C.; Edward A. Raymond, Capt. and A. D. C.; William W. Russell, Maj., U. S. M. Corps; A. G. Verplanck, Lieut. and A. D. C.; Norman J. Hall, 1st Lieut. 5th Art., Asst. to Chief Eng.; Henry L. Abbot, Captain, Top. Engineers; D. P. Woodbury, Brig.-Gen. Vols.; W. H. Wood, Major, 17th U. S. Inf.; Stewart Van Vleit, Brig.-Gen. and Chief Q. M.; W. F. Gentry, Capt., 17th Inf.; John B. Howard, 1st Lieut., A. Q. M.

Many other gentlemen were anxious of signing their names to this paper, but were prevented by absence on duty and sickness.

AN ACT PROVIDING ADDITIONAL SURGEONS FOR THE ARMY, AND REGULATING BRIGADE SURGEONS.

THE following is an abstract of an act to provide for additional medical officers of the volunteer service:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be appointed by the President, by and with the advice and consent of the Senate, forty Surgeons and one hundred and twenty Assistant Surgeons of volunteers, who shall have the rank, pay, and emoluments of officers of corresponding grades in the regular army; *Provided*, That no one shall be appointed to any position under this act unless he shall previously have been examined by a Board of medical officers, to be appointed by the Secretary of War, and that vacancies in the grade of Surgeon shall be filled by selection from the grade of Assistant Surgeon on the ground of merit only: *And provided further*, That this act shall continue in force only during the existence of the present rebellion.

SEC. 2. *And be it further enacted*, That from and after the passage of this act Brigade Surgeons shall be known and designated as Surgeons of volunteers, and shall be attached to the general medical staff under the direction of the Surgeon-General; and hereafter such appointments for the medical service of the army shall be appointed surgeons of volunteers.

SEC. 3. *And be it further enacted*, That instead of "one Assistant Surgeon," as provided by the second section of the act of July 22, 1861, each regiment of volunteers in the service of the United States shall have two Assistant Surgeons.

Approved July 2, 1862.

Under the provisions of the foregoing act approved July 2, 1862, the Brigade Surgeons already appointed are transferred, according to their present rank, to the Corps of Volunteer Surgeons, which will accordingly consist of those officers, and of the forty provided for by the act.

The Surgeon-General will appoint a Board to examine such persons as may be authorized by the Secretary of War to present themselves before it as candidates for the forty vacancies in the grade of Surgeon, and one hundred and twenty in that of Assistant Surgeon.

Applications for the appointments will be made to the Adjutant-General of the Army, in the handwriting of the applicant, accompanied by one or more testimonials from respectable persons in regard to moral character.

The Board of Examiners will determine whether the candidate be fit for the position of Surgeon or Assistant Surgeon; but no one under thirty years of age will be appointed to the former grade, or under twenty-one years, to the latter grade.

After all the vacancies have been filled in the manner here prescribed, future examinations will be for the grade of Assistant Surgeons only; and vacancies which may happen in the grade of Surgeon, will be filled by the appointment of Assistant Surgeons who shall have shown themselves worthy of promotion by a faithful performance of duty and general good conduct.

By order of the Secretary of War.

L. THOMAS, Adjutant-General.

Medical News.

SURGEONS WHO VOLUNTARILY REMAINED IN RICHMOND WITH THE WOUNDED.—Pursuant to a call a meeting was held of the Union Surgeons now in the Confederate State Prison. On motion, Dr. M. S. KITTENGER was elected Chairman, and Dr. J. P. SEELY Secretary. The Chairman stated that a notification had been received from the Confederate authorities that all the Surgeons now prisoners were this day free to return home. In a few brief and eloquent words he mentioned the fact that, in this building alone, there were nearly 1,500 of our wounded or sick officers and soldiers, and altogether, probably, in Richmond, 3,000.

On motion, it was resolved that all those Surgeons who volunteer to remain, and extend their professional services to our sick and wounded, do now signify the same. Whereupon the following gentlemen volunteered to remain: N. F. Marsh, Surgeon Fourth Pennsylvania Cavalry; Alex. A. Edminston, Assistant Surgeon Eighteenth New York Volunteers; James W. Powell, Surgeon in charge Hooker's Division Hospital; George McAllister, Assistant Surgeon Seventy-first New York Volunteers; James S. de Bienneville, Surgeon Eleventh Pennsylvania Reserve; M. S. Kittenger, Surgeon One Hundredth New York Volunteers; T. P. Seely, Acting Assistant Surgeon Sixteenth Michigan (Stockton's).

THE following assignments have been made of medical officers: Medical Inspectors Perley and Cooledge to duty in the Surgeon-General's office and in the Military District of Washington; Medical Inspectors Cuyler, Keeney, Lyman, and Allen, to report in person to the Assistant Surgeon-General in St. Louis, for duty in the department of the Mississippi. Medical Inspector Mussey and Assistant Surgeon Parry to report to General McClellan in the Army of the Potomac.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.

SESSION 1860-61.

BY A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

LECTURE XI.—PART II.

Physiological Conclusions.—Physiological and Pathological Hyperæmia of the Brain.

Now, the principal results of these carefully collected and compared figures are, among others, these: The anterior lobes of the large hemispheres are small in proportion to the bulk of the brain. The cerebellum also is small in proportion to the cerebrum. Both the anterior lobes of the large hemispheres and the cerebellum grow more rapidly in early infancy than the generally rapid development of the infantile brain would explain. That the brain itself grows most, at the same period, in proportion to the other organs of the body, I have often had the opportunity of telling you. Finally, there is little cortical, grey cerebral substance, and not the distinct difference between the grey and white substances of later life.

Just draw your physiological conclusions from these facts, translate as it were anatomy into physiology. The simplest physiological facts you would conclude from the dates I have given are these. The mental, intellectual faculties of the infantile brain, are little developed; the less the earlier the period of our observation. The power over the voluntary muscles is very limited, indeed. The mutual counterbalancing of the really central, and the conducting portions of the brain is not well pronounced. There is, with the intense growth, intense action of the brain, in its course of development. The less settled the condition of an organ, the more it is exposed to irregular action. Therefore the great irritability of the brain in general is well explained by its anatomy; but particularly the intense irritability of the anterior lobes of the large hemispheres and the cerebellum.

This irritability shows itself less by increased physiological action, than by its irregularity and abnormity. For instance, the irritation of the sensory organs, the functions of which are transferred to the grey substance, does not increase their exactness and accuracy; that is, such patients do not see, hear, and feel better, but they are molested by impressions which were hitherto normal and agreeable. There is intolerance to noise, scintillation, pain in the eye, and on the periphery of the cutaneous nerves.

The increased growth of the cerebral substance explains the great afflux of arterial blood with its normal amount of oxygen. This is particularly the case in those portions of the brain mentioned by me as the seats of intellectual and voluntary motory power. This physiological injection, however necessary for the normal development of the parts, becomes by its very intensity, easily pathological, that is the transition from the healthy condition of the organ to disease is very easy indeed. You know that I have often pointed out to you the necessity of not looking on disease in general as something essential and peculiar in itself, but as the expression of the physiological functions and appearance under altered circumstances.

In the majority of cases of pathological cerebral hyperæmia, brain, cerebral membranes and integuments, are equally affected. Sometimes, however, the injection is noticed only in the larger, and also the smaller, bloodvessels of the membranes; very rarely the brain alone, and exclusively, is found to be the seat of the anomaly. In other cases the process is but a partial one in other respects; there are some in which only the white substance, or the cerebral portion of the brain, or a single hemisphere, or the cerebellum, or even the cortical substance alone are affected. Some of these facts may get nearer their explanation by their anatomical condition; perhaps the falx cerebri, and the cerebellum separating principal parts of the brain, prevent the uniform spreading of originally local hyperæmia. Discolorations of the arachnoid membrane, œdematous effusions of the pia mater, and small extravasations are frequent; œdematous mollification of the cerebral tissue, however, are rare companions of the above alteration.

There is no age in which cerebral hyperæmia is so frequent as early infancy, and therefore, also, the period of the first dentition. The newly-born and the healthy male nursling are particularly subject to the primary and idiopathic form, which often depends not only on the physiological afflux of a large amount of blood, but frequently also on the injurious effects of too high a temperature, tea and coffee, opium, and alcohol. The secondary, consecutive form depends on disturbed circulation of the blood, in diseases of the lungs and heart, in overloaded stomach and intestine, inflamed peritoneum; in the somewhat advanced period of infantile life, acute exanthems, typhoid and other fevers, impaired condition of the blood, mental emotions, are not at all rare causes of cerebral hyperæmia. Concussion of the head, extensive and thorough refrigeration of the skin, are further occasional sources of the same affection, and attacks of convulsions produced by whatever cause, become dangerous by the secondary injection brought on by the spasmodic action of the muscles of the neck, and chest, and diaphragm, and abdomen, in a great many cases.

Among the symptoms of cerebral hyperæmia in children those of the motory organs are prevailing over those of the sensory ones. They are often mistaken for those of meningitis, and sometimes so easily that a correct differential diagnosis of the two is by no means possible, except on careful observation of the course of the disease. Generally, such children have suffered from costiveness, for several days, their sleep was restless, they ground their teeth, had frightening dreams, headaches perceptible by the perpendicular wrinkling of the corrugator muscles of the eye-brows, and took a long time before falling asleep. Vomiting will then set in, the pupil becomes contracted from the irritation of the oculo-motory nerve, and some muscles will be observed to suffer from spasmodic affections. These local twitchings are followed by general convulsions, or the case may be severe enough to exclude the gradual development of these symptoms. In such cases the convulsions, commencing in one limb, or in one side of the face, spread rapidly over the whole body. These general clonic convulsions sometimes alternate with tonic ones, general tetanus taking place; then again the muscles of the neck will be found rigid, in tonic contraction, while the clonic convulsions spread over all the muscles of the extremities. Sometimes a remission will take place after half an hour, or an hour, and the attack may stop altogether; but very frequently the former vehemence of the affection returns, and may even result in death. During the attacks there is no mental nor sensory reaction. The most powerful irritations of the skin are not felt, the pupils do not react, consciousness is entirely gone. The skin is in perpetual perspiration, respiration is interfered with, saliva becomes foamy from the constant motions of the masticatory muscles, and the abdomen tympanitic. Nevertheless in almost every case the prognosis is favorable; always provided that meningitis, both the genuine and the tubercular forms, can be excluded. At the period of life of which I principally speak, both forms are not very frequent. Genuine, often so-called suppurative meningitis, is generally found after traumatic injuries of the head, or diseases of the cranium. Tubercular meningitis is rarely found before the first, or even second, year of life, and generally preceded by

a number of long continued symptoms, of which I need not speak at this occasion.

The symptoms of gradually developed anæmia of the brain are very similar to those attending hyperæmia, as irritation sets in first, followed by depression and paralysis. These symptoms cannot be well explained by a change in the pressure of the cerebral substance, which may be assumed to exist in hyperæmia, but it appears that a certain amount of pressure, resistance, or tension is necessary, and that both too little and too much are equally injurious. Moreover, physiological experiments have proved that there is always a stage of irritation preceding the entire extinction of nervous action; therefore, increased irritation is not the result of increased, but of diminished nutrition. Therefore, also, a moderate degree of cerebral anæmia is attended with the symptoms of irritation, the highest degrees, however, with those of paralysis. Thus Marshall Hall distinguishes an irritable and a torpid stage of hydrencephaloid disease. The first name is given to such cases of cerebral anæmia in children, in whom there is still irritation of the motory functions; the second is applied to those already paralysed. In the former, the children are restless, grind their teeth, show frequent symptoms of sudden fright, and shrill out in their sleep, and have a flushed face, frequent pulse, and increased temperature. At last, sometimes convulsions will be observed. The second stage, which will always follow a mistake made in either diagnosis or treatment, exhibits collapse and apathy in the patients; the power of accommodation is disturbed, the eyelids are half-closed, and the pupils show no reaction to the influence of light, respiration becomes irregular, and under pulmonary œdema and coma life becomes extinct.

I have deemed it proper to compare these two conditions, anæmia and hyperæmia, for their practical importance. Both are as frequent as they can become dangerous. You see, however, at once, from the various, both physiological and extraneous causes capable of producing hyperæmia of the brain, how little space is left for the assumption of dentition, that is the protrusion of a tooth, being in itself a cause of cerebral hyperæmia. The fact is, as I have often said, that hyperæmia of the brain, and such either local or general symptoms as are generally attributed to dentition, are co-ordinate results of the physiological process of local irritation and development, be they normal or excessive; with the exception of those few cases, where a local inflammatory process in the jaws or gums will give rise to fevers and their sequelæ.

Original Communications.

CASES

TO SERVE IN THE HISTORY OF THE RELATION WHICH EXISTS BETWEEN

PUERPERAL FEVER AND EPIDEMIC ERYSIPELAS.

By M. PIHAN-DUFEILLAY,

INTERNE DES HOPITAUX, MEMBER OF THE SOCIETES D'ANTHROPOLOGIE ANATOMIQUE-MEDICALE D'OBSERVATION.

[Translated from the French of the Union Medicale, by Dr. P. F. C. Deslandes, of New York.]

(*Continued from* p. 62.)

CASE II.—Was one of a woman 40 years old, short, of great muscular strength, not fat, accustomed to hard work, and of excellent health. She had entered the wards of Mr. Hardy to be treated for an erythema of the hands and forearms, brought on by the continual handling of a liquid containing tar and used to lay on linen cloth, and render it waterproof. She wished to take advantage of her sojourn in the hospital, to have a wen of the scalp, the size of a hazelnut, removed, and to which Mr. Hardy applied the *caustique de vienne* (equal parts of quicklime and caustic potash). Several days elapsed without the least accident, the patient, nearly cured of her erythema, and moreover in excellent health, was anxious to leave the hospital, when she was transferred from the *Salle Henri IV.* to No. 32 of St. Ferdinand's.

Four days after this removal, that is twelve days after the application of the *pâte de Vienne* to the summit of the wen, she was attacked with fever, malaise, pain, tumefaction of the sub-maxillary ganglions; and the next day, instead of the symptoms following the application of caustic, an inflammation of the lymphatic ganglions and vessels, characterized by well marked red tracks, extending from the edges of the scar to the affected ganglions. It preceded only by twenty-four hours the appearance of an erysipelas perfectly marked, which came on March the 27th. The symptoms, as you see, appeared two days before those which showed themselves in the subject of our first case. In this they made their appearance after three days, in our first woman after four days of sojourn in the ward.

The general phenomena acquired rapidly an extreme intensity; the pulse rose to 130, was small and depressible. Diarrhœa supervened, presenting the same characteristics as in the previous subject; the tongue was red at its edges, covered in the middle, as well as the teeth, with a layer of fuliginous matter. The abdomen was flat and painless. No nausea. The patient fell, the second day of the eruption, into such a state of prostration that, from that moment, we had the most serious fear of a fatal termination.

The erysipelas extended, brought on sphacelus of the most superficial layers of the right eyelid, then stopped in its march; on the fourth day (27th of March) the general symptoms persisted; nocturnal subdelirium; intense diarrhœa, tongue fuliginous; pulse 130, very depressible; marked dyspnœa without alterations of the organs of hæmatosis nor of the larynx; extreme prostration, intellect perfect except during the nocturnal sub-delirium. The spleen revealed on percussion an increase in volume of about one inch.

On the 23d of March a new erysipelatous eruption came to aggravate the disease; it extended all over the scalp, reached the posterior part of the neck, then its anterior portion extended to the base of the breasts. The general phenomena were not sensibly modified by this extension of the local lesion; but their persistence, with an equal intensity, placed the life of the patient in imminent danger. However, on the 25th, the pulse fell to 100, became a little stronger, the dyspnœa decreased, and there was a very slight, but a real amelioration. The desquamation had fairly begun on the face, whilst the second erysipalatous eruption was at its height on the neck.

The amelioration continued; to the tumefaction and phlyctenæ succeeded desquamation; and, on the 30th of March, she could digest soups and a little solid food, such as mutton chops without bread and eggs. The diarrhœa, although decreased, existed still; the patient was excessively weak; the dyspnœa had almost totally disappeared, when a third erysipelatous eruption made its appearance, invaded the parts already affected, reascended from the neighborhood of the sternum, where it began, to the neck and the scalp. The only phenomenon of general reaction which marked this recrudescence was a marked acceleration of the pulse, which rose to 135. Apart from this peculiarity, the other general phenomena remained stationary. The fourth day (2d of April) this erysipelatous eruption began to decrease and desquamation also followed.

The general condition of the patient went on ameliorating little by little, notwithstanding three other eruptions similar to the preceding, but was much less extensive and less intense, which appeared on the parts which had already been affected, and the face, the neck, and scalp, on the 6th, 10th, and 15th of April.

The patient, whose recovery, in the ward, seemed impossible, had to take advantage of a considerable amelioration to leave the hospital at the end of April. She was sent to

the *Asile de convalescence du Vésinet*, notwithstanding her great debility and her sickly condition, which seemed to demand a longer stay in the hospital. We have been informed that she has completely recovered there in a short time.

Case III.—At the same epoch, a young woman, 23 years of age, multiparous, of a lymphatic constitution, admitted in the ward St. Ferdinand, two days after its consecration to skin diseases, was placed in the No. 27, there to be treated for a patch of Herpes circinnatus seated on a level with the furcula of the sternum. She was seven and a half months gone in pregnancy, and her gestation had been so favorable that she was still ignorant of her condition, and asked us to examine the abdomen in order to ascertain the nature of a tumor, the rapid increase of which alarmed her. She had moreover a small erectile congenital tumor the size of a len on the left temple.

Seven days after her entrance she was taken with chills, tumefaction of the cervical ganglions, malaise, and fever. Considering the cases we had under our eyes, we diagnosticated an erysipelas. A well marked inflammation of the lymphatics, which surrounded the tumor, existed the next morning, and was followed in the evening, as in the preceding case, by an erysipelas which soon invaded the face and scalp.

The general symptoms were identical with those which we have mentioned in the precediug cases, and to avoid useless repetitions, we sum up in a few words those which have been prominent, with slight intermissions of aggravation or amelioration from the beginning to the end of the disease: Abundant and fetid diarrhœa; tongue at first red and then fuliginous; dyspnœa without alteration of the respiratory organs; very marked prostration; clearness of the intellect, except at night, when there was at times a subdelirium; pulse small, depressible, with some intermission during the more serious period of the disease, beating 110 to 140 pulsations. The examination of the spleen revealed a considerable hypertrophy of that organ.

The erysipelatous eruptions followed each other irregularly, and we counted five of them in twenty-two days; two of these appeared on parts which had already been attacked once a few days before. Twenty-five days after the beginning of the disease the general symptoms had greatly improved; the patient, the prognosis of whose disease had been of the gravest kind, was beginning to take some solid food when the labor pains came on.

The delivery was most prompt and easy, the child came living into the world; the patient, who was most anxious to remain in the room St. Ferdinand, did not make her condition known till the last moment; however, she was transferred to the room Henri IV., where there was at that time one epidemic disease. She had a happy recovery, which neither her extreme weakness nor the extensive desquamation of the parts affected with erysipelas, impeded. Eight days after her delivery, she insisted upon resuming at St. Ferdinand the bed she had left a few days before; her weak condition was still such that she had to be removed on a sedan. Twenty-four hours after her return to this room, she was seized again with chills, and a new erysipelas of the face invaded the parts, already twice attacked, and where desquamation was still going on. This eruption was accompanied by the same cortège of general symptoms, less intense, however, than in the preceding; and so soon as there was a sufficient amelioration, we hastened to prevent a new relapse and keep up the convalescence, to dismiss the patient. She left the hospital the last day of April.

This woman has re-entered, on the 7th of August, the wards of M. Hardy, to be treated for a most marked anæmia, and she has informed us that not only she has not had any relapse outside of the hospital, but that at the end of eight days, she could, notwithstanding her great debility, follow her occupation.

Let us sum up in a few lines the prominent features of these three cases, which present to us in a higher degree the same phenomena met with in the other patients affected with a less serious erysipelas, after their passage or their admission into that room which had been the focus of a very intense epidemic of puerperal fever.

Three women, the two first in good health, the third very healthy also, although rather weakened by the fatigues inherent to pregnancy, are all at once placed in a medium, where a little before reigned puerperal fever. Erysipelas made its appearance in many of the women of the ward, and many others, in our three patients.

In a variable period of time, but not less than three days from the time of exposure to the infectious miasma, a chill comes on, then fever, swelling of the ganglions, and twenty-four or forty-eight hours after, the erysipelas makes its appearance accompanied by the gravest symptoms: prostration, weakness, intermittence and rapidity of the pulse, fœtid diarrhœa, fuliginous tongue, enlargement of the spleen, and preservation of the intellect, notwithstanding the nocturnal sub-delirium. Two of our patients survived these accidents; they remained for nearly two months in a state of extreme weakness kept up by continued relapses and new eruptions which succeed each other at different periods, on the teguments already once affected. I will observe that the symptoms which have always been of a very great gravity, have not always followed a march parallel to that of the local accidents. As to the other patient, she dies in a few days, carried not by the phenomena inherent to the intense erysipelas of the scalp, but sinks under all the grave general symptoms already enumerated, and which have no relation as to form, march, aspect, or nature, with the symptoms of meningitis, of cerebral reaction, coma, delirium, etc., which are the causes of death in cases of simple erysipelas of the face or of the scalp. Autopsy reveals to us a hypertrophied and softened spleen, an injected peritoneum or larynx, the mucous membrane of which is altered by a kind of sphacelus. The blood is black and in soft clots; but nothing is to be found in the viscera which we might à priori have supposed affected.

When we see under such conditions a disease reputed inflammatory, break out of a sudden throughout a whole ward, and assume a type so uniform, and, at the same time, so opposed to that which is generally attributed to it, we are naturally led to seek for its origin in a general cause, whose mode of action is identical on the different subjects exposed to it, and which behaves after the manner of malignant fevers or of specific inflammations.

The autopsy of one of our patients causes us to support this opinion, by showing us the hypertrophy and softening of the spleen which form an essential character of the disease, since we have ascertained by percussion this enlargement at different degrees on the majority of the patients we have been able to examine on this occasion. But I shall not insist any longer on this fact. We have not, in fact, to demonstrate the analogy between erysipelas and fevers produced by alteration of the blood, nor to discuss the part and relative degree of importance of the general symptoms and local phenomena. Erysipelas, and this is generally admitted, is not always only the result of a local lesion; it is also dependent on causes, the action of which is more general. Now, among the causes which must give it a special character, according to their nature, there is one, the power of which is still denied by the majority of pathologists, and which even now is rather suspected than accused of producing erysipelas in certain given circumstances. This cause is no other than puerperal fever. Can, then, this same cause of infection applied to subjects not wounded and outside the conditions of parturition, manifest its action by the apparition of grave erysipelas, and are these erysipelas characterized by an ensemble of special general phenomena, which allow us to recognise their precise nature? This is a question which cannot be prejudiced, and which can only be solved by the examination of numerous facts.

Unhappily, we possess but few cases of this kind, not so much because they are rare as because such facts have

remained buried in oblivion. They have passed unperceived, attention having not been drawn to them, and we can recall but very few examples very well authenticated.

M. Alexis Moreau observed, during the year 1843, that there reigned among the *élèves sages-femmes* of the Maternité, an erysipelatous constitution which coincided with an epidemic of puerperal fever in that hospital. Some were very seriously taken, and one died. Two nurses were also affected with spontaneous erysipelas, and one of them went to die at the hospital *Cochin.*—(*Alexis Moreau, Thèses de Paris*, 1844.)

M. Botrel, in his description of the epidemic of puerperal fever at Rennes, remarked, in the patients under his observation, inflammations of the lymphatics unusual as to their number and gravity. "There are others," says he, "affected with inflammation of the lymphatic vessels, following contusions, very slight punctures, abrasions, sometimes even without any appreciable cause."—(*Botrel, Archives Générales de Médecine.*)

In his inaugural thesis, M. Masson mentions cases analogous to the preceding. Nurses and pregnant women were attacked in the wards of the clinique d'accouchemens of the faculté, with grave erysipelas, whilst puerperal fever reigned among the newly delivered.—(*Masson, Thèses de Paris*, 1849, *p.* 32.)

In 1856, the wards of the clinique d'accouchement of the faculté were evacuated to cut short an epidemic which could not be otherwise arrested. A ward of ordinary patients was established there under the direction of M. Pidoux, almost all the patients died, even those affected with the most benign diseases, from the complication of gastric symptoms, and above all, of spontaneous erysipelas which attacked the great majority of the patients admitted in the ward.—(*Trousseau, Académie de Médecine, Communication, Séance du* 16 *Mars*, 1858.)

In the practice of Dr. Sidey, a puerperal fever caused four or five cases of erysipelas. A young woman, Mme. X———, died in a few days from puerperal fever, which had made its appearance three days after her delivery. In the same week, her mother-in law, who had nursed her, was attacked with violent erysipelas of the head and face. The day after that in which the disease had made its appearance in this lady, her grandson, five years old, became in his turn the victim of the erysipelas; two days after, her grand-daughter kept her bed laboring under a most intense angina with erysipelas of the face and typhoid symptoms; lastly, the sister-in-law of Mme. X———, who sojourned for some time in the room of the lying-in woman, presented at the same time symptoms of gastro-enteritis and of abdominal inflammation, of which she died in a very few days.—(*Simpson's Obstetric Works, LII., p.* 32.)

Lastly, what is this erysipelas which affects new-born children epidemically, when they are kept in the atmosphere of lying-in wards, where their mothers are laboring under puerperal fever, an affection which sometimes simulates traumatic erysipelas when it begins around the wound of the navel, and sometimes is truly spontaneous, when it develops itself around the mucous orifices or on the continuity of the limbs, without any previous lesion or exulceration; as we have observed this year several cases? Is it not the same infectious cause which in the mother produces puerperal fever, and in the child erysipelas? A twofold manifestation of one single morbid condition, whose symptomatology varies in proportion to the changes necessarily caused by the difference of age and of conditions which separate the mother from the child.

(*To be Continued.*)

Malpractice.—Dr. Royal M. Ayer, of Danville, Vermont, has been mulcted in the sum of $300 and costs, for malpractice as a surgeon, in setting the shoulder of a Mrs. Stalina Gill, of that place. The case was tried in the Caledonia County Court.—*Med. and Surg. Reporter.*

REMARKS ON SCARLET FEVER.

By A. SEARLE, M.D.,
of Onondaga Valley, N. Y.

[Read before the Onondaga County Medical Society, Jan. 27, 1862.]

I commenced the practice of medicine in Onondaga county, in 1815, and never saw or heard of a case of Scarlet Fever, in Central New York, nor west of the Hudson river, till about the year 1821, when one occurred in my own practice, in a young athletic man, who lived on the highlands near Skaneateles lake. The patient was attacked with fever of a very sthenic type, which was attended with an uncommon redness over the body, more especially the head. There was no papillary eruption as appears in many of the severe cases. It being the first case of the sort that had occurred to me, I was unable to make a diagnosis that was satisfactory to myself, but I followed the general indications, by adopting the antiphlogistic plan of treatment. The patient soon recovered.

Another case occurred about a year afterwards, on high land, in an adjoining town, in a strong and otherwise healthy child, two or three years of age. I was called to see the patient in the evening, and prescribed the same plan of treatment, which I may say was my habit of treating all fevers. First, vomiting was induced, and subsequently a laxative was given, the idea being to reduce the fever and clean the primæ viæ. I left about nine o'clock P. M., but was sent for again about twelve o'clock the same night, when I found the medicine had operated thoroughly, but the patient was in a moribund state. I was much surprised, and could not understand what could have been the cause of such a sudden change. At first I supposed it must be some new and very malignant form of fever, inasmuch as such a termination had been so unlooked for, and subsequently I ascertained that scarlatina existed in the country; but knowing this fact did not alter my plan of treatment, and of course my success was very discouraging. I did not learn how to treat the disease properly, either from the results of my own practice or from that of others, till about the year 1830. Being at that time in my native town, in New England, a certain Botanic Doctor, who had received a pretty good common education, spending some time at the Pittsfield Medical Institution, gave me a pamphlet written by himself on the subject of Scarlet Fever. He maintained that the disease was harmless in its nature, and that altogether it was the habit to give too much medicine. According to his view of the case, the medicine should be of the mildest sort, and of course should consist of domestic roots and herbs. He boasted great success by this plan, and though many remarkable cures were cited, I was inclined to put some faith in his statements. I was led from that time to think over the whole subject seriously and thoroughly, and though the ideas which I then received were from a tainted source, the result of my practice in using but little medicine has been such as to cause me to rejoice that I ever met the empiric.

About the year 1844, scarlet fever prevailed pretty extensively in the south part of Onondaga county. It went through whole families and neighborhoods, and though mostly confined to children, and the younger part of the inhabitants, the older people were by no means exempt from its influences. I had at one time the care of a family, where all the children, five in number, were down at once. I adopted the theory, that the disease was specific in its nature, that it was contagious, epidemic, and endemic. That it affected a person but once in life; was destined to have a regular course, as much so as any other contagious disease; that the contagion might be communicated in the sick room, from one to another, and also might be carried in the atmosphere, over the hills and valleys, affecting such families as lived in the direction of the currents of air which brought the infection. I also believed that it was received into the circulatory system, probably by inhalation by the lungs, and that it affected every part of the system where the blood circulates, with a peculiar kind of erysipelatous

inflammation, and that after a certain time of incubation, it developed itself on the surface of the body, in the skin, and in the glands of the throat, where the disease spent most of its specific and destructive effects. Holding to these views I governed my practice strictly in accordance with them.

It affects all constitutions alike, and in different degrees of severity. If it should attack a strong person, its effects are a rapid prostration of strength, and if the patient have a slender constitution, I have not observed that the effect is any the less severe. Sometimes the eruption will be more and the anginose affection less, and *vice versâ*.

The disease may with propriety be called by different names, indicative either of its particular character or its particular complication. For instance, Scarlatina Simplex, Scarlatina Anginosa, and Scarlatina Maligna. The nature and tendency of the disease are the same in all cases—to rapid dissolution, sphacelus or gangrene, mortification, and death. I have thought, sometimes, to compare the system to fire, which having swept through it and over it, has left every part tender and *contrite;* and in keeping with this idea, we find that only such remedies are grateful and efficient as tend to soothe and ease quietly along. There is no specific for this disease; it must run its course, and medicine only helps nature in her efforts to eliminate the poison. If nature is incapable of performing the cure, it is useless to hope that medicine can do it. The physician, in the treatment of this disease, is as a pilot who in a dangerous channel only cares to avoid the rocks and quicksands of complications, and keep his bark waterproof, until the dangers shall have passed.

As I have before intimated, the nature of the disease, with all its various symptoms, must indicate the treatment. The symptoms of vomiting I have found are soonest allayed by the use of tartar emetic, in the smallest doses that will produce emesis. If three grains are put into a teacup half full of water, a teaspoonful will be sufficient for a person twenty years of age; it may be repeated once or twice, and the dose may be increased or diminished according to the age and constitution of the patient. But it should not be repeated oftener than this, for the good reason, that the disease will not require it, and the patient will not bear it. When the morbid action of the stomach is overcome, the object is attained, whether the emetic produces vomiting or not. Emetic tartar is better than ipecac, in most cases, unless used for young children. But a child or any other person might be so feeble in the commencement, as to forbid the use of either. Tartar emetic, when taken in doses sufficient to nauseate a little, has a more general relaxing effect upon the system than ipecac, and tends to remove congestions, by opening the pores of the skin. All this can be accomplished without giving rise to any dangerous depression.

What I have to say more particularly in regard to the symptoms and treatment of the disease, may be partly comprised in the symptoms and treatment of the family of five children. I shall use the points in these cases, as so many heads for the remarks I have to offer upon the disease in general. I may be allowed to premise sufficiently to say that the five cases all recovered. The bowels would generally require a single dose of oil, and not repeated, for the reason that a large dose of most kinds of cathartics, would be very likely to reduce the strength of the patient, and prove fatal, not simply by inducing debility alone, but a metastasis of the disease to the intestinal tract. The next symptom is burning heat on the skin, all over the body. If this is not exactly what it should be, it is just what we should expect. It is the very nature of the disease. I think it is not safe to attempt to prevent it scarcely with internal or external applications, excepting what little cooling and diluting drinks will do. The tongue being coated with a very white and buffy coat, with the edges a bright red, requires nothing. If the treatment has been correct in the commencement, we may in general expect the tongue to become clean, or the coat to clear off, in about three days, and the whole surface appear shining and red as scarlet. The oldest daughter, about twenty years of age, when first attacked with high fever, and more of sthenic diathesis than the rest, was attended with delirium, which soon yielded to a moderate bleeding. Then the disease went on without any other dangerous symptom, The mild treatment was pursued. This consists either of saffron tea, spt. nit. dulc., solution carb. soda, sometimes a little ipecac as a diaphoretic, muriate ammonia, carb. ammonia, cream tartar, mucilage, gum arabic, and slippery elm bark. Another daughter, about three years younger, in addition to the common symptoms, was afflicted with malignant inflammation of the whole palate, fauces, and tongue. This organ was so black and shrivelled, that it lost all its normal shape. As in this case, so in all other cases of anginose affection, in the commencement, I used astringent gargles, composed either of alum, borax, gold thread, or sage tea and honey. In cases of malignancy, I prescribe a decoction of Peruvian bark and gum myrrh; and in cases of more malignancy I employ nitrate of silver once or twice, till the black crusts separate, then come back to the Peruvian bark and gum myrrh. One more symptom that required local application, occurred in the youngest daughter, about six or seven years of age. The termination of the disease was attended with an obstinate ulcer on the side of the neck, a little below and posterior to the parotid gland. The flesh seemed to dissolve, or slough away unseen, like the melting of ice, till a pretty large, pale, flat sore appeared, with tendons in view. I found that no external application would suit, but a cataplasm made of slippery elm bark, beat up into a soft consistence, then after waiting many days a mild ointment was effectually applied.

(To be Continued.)

A CASE OF RECTAL ABSCESS.

By J. J. CONNOLLY, M.D.
OF NEW YORK.

On the sixth of last July I was called to see William H., æt. 45 years, a native of Ireland—married—a liquor-dealer by occupation. On the occasion of my first visit I obtained the following history. Some three weeks previously he was seized with a severe chill, followed by high burning fever, accompanied with a dull, heavy, throbbing pain, which was especially referable to the neighborhood of the rectum.

Doctor R., a physician of this city, was sent for, who diagnosticated acute inflammation of the bowels, and at once instituted the following treatment. Powerful cathartics were freely administered, morning, noon, and night; and these not answering the purpose recourse was had to stimulating enemata. Finally, the bowels were freely moved, but not to the entire satisfaction of the doctor, who directed the friends to persist in the same treatment. In the meantime counter-irritation was to be made all over the abdomen, and the patient was to have no nourishment save *ice water and milk*. The sick man enjoyed one whole week of this delectable regimen, with no sleep and not one moment's relief from his pain, which had now become excruciating; when his physician discovered the existence of a swelling a little to the left of and about one inch from the margin of the anus. He now directed leeches to be applied to the swelling, and subsequently poultices. The latter were continued for some days, when it occurred to him a surgical operation should be performed for the benefit of his patient, which he proceeded to perform in the following very *unsurgical* manner.

Standing upon the floor and grasping the foot of the bedstead with his left hand, he extended the right hand, holding the knife, to his patient, and with one sweep cut through the tumor, etc., laying open the left wall of the rectum for a distance of full three inches. The contents of the bowels now gushed out of the wound, and a poultice was ordered. The drastic cathartics were still to be con-

tinued, and, in order to promote their efficiency, the patient was directed to walk the floor for an hour at a time after each dose. He was also recommended to visit the Central Park at least once a day in a carriage; but *positively* no stimulants were to be administered—no nourishment save beef tea and jelly, and those very sparingly, and no anodynes lest they should interfere with the peristaltic action of the bowels. After ten days of this treatment—cathartics, poultices, and *very low diet*—he was so much worse that the physician, becoming alarmed, abandoned the case.

I saw the patient for the first time about 4 o'clock P.M., July 6th. He was then the subject of very high irritative fever, the pulse was small, feeble, and rapid—one hundred and sixty beats per minute—the respiration somewhat oppressed—the tongue dry, brown, and thickly coated—the countenance very anxious and restless—there was marked depression of spirits accompanied with low muttering delirium; and upon inquiry I ascertained that he had had frequent rigors during the three days immediately preceding my visit. I first examined the chest, and readily detected the existence of tubercular deposit in the apex of the left lung. I next examined the wound, through which liquid fæces mingled with pus flowed abundantly. The external wound measured full three and a half inches, and had pretty nearly the direction of the lateral operation for stone in the bladder.

Introducing the index finger of the right hand through this wound, and that of the left hand through the sphincter ani, which was still undivided, and through which nothing had passed since the date of the operation, both met within the rectum, and by carrying one finger up and down over the other I judged the incision in the wall of the gut to be at least three inches long. There was a great deal of redness, pain, and tenderness about the parts. I syringed the wound with castile soap and lukewarm water, filled it with dry lint, and put on a T bandage. I directed one gr. of opium to be given every three hours, five grains of quinine every four hours, and brandy and beef-tea almost *ad libitum*. Next day the pulse was down to one hundred and forty, the patient had had a few hours' sleep and expressed himself as being much more comfortable. Recognising the extreme gravity of the case in all its bearings, and being unwilling under the circumstances to divide the sphincter ani on my responsibility, I requested a consultation, and Doctors Valentine Mott and John O'Reily were called in to see the case, with whose approbation I divided the sphincter and dressed the wound with dry lint as before. The quinine, opium, and beef-tea were continued, and the quantity of brandy increased from sixteen to twenty ounces in twenty-four hours. In addition, ten grains of carbonate of ammonia were directed three times a day. The patient seemed to rally under this generous treatment, the alvine dejections having been almost entirely arrested; but the delirium continued, and he sank and died July 13th, seven days from the date of my first visit.

I forbear commenting on this case, and leave each reader to draw his own conclusions.

34 West Houston Street.

Dr. Dickson, Assist. Surg. 33d N. Y. V., Col. Taylor commanding, who was in charge of our wounded at "Liberty Hall," where Patrick Henry is said to have been born, has been released, and has returned to his regiment. He was detained in the "Officers' Prison," Richmond, only a day or two. All the officers, not wounded, are in the same prison, an old tobacco warehouse. Genls. McCall and Reynolds are there. The building is crowded, not very well ventilated, and the officers are not permitted to go outside.

Dr. Robinson, Assist. Surgeon in one of the New York Regiments, late from Hornelsville, N. Y., taken prisoner in the retreat, was returned on Friday, July 18th, having been detained a short time in the "Officers' Prison," Richmond.

Reports of Hospitals.

MILL CREEK GENERAL HOSPITAL.

FORTRESS MONROE.

MEDICAL SUPERINTENDENT, DR. JOHN W. HUNT, U.S.A.

Reported by Orestes M. Pray, Medical Cadet.

Case I.—*Secondary Hæmorrhage—Death.*—John N. Monroe, 5th Mich. Company I, about 23 years old, healthy, temperate; wounded at battle of Williamsburg, Monday, May 5, 1862, by a bullet which entered outside of right thigh about four inches above the knee, coming out on inside of leg about five inches below the knee; bone not injured. Entered hospital May 11th, and for ten or twelve days was doing well. Secondary hæmorrhage occurred about the 25th of May; wounds were plugged, a tourniquet applied, and firm roller put on from foot to upper wound. Patient commenced vomiting; nothing could be retained upon the stomach. At about 8 A.M., May 27, he died quietly. For twelve hours previous, there had been no perceptible pulse at the wrist, though the patient was conscious till the last.

Case II.—*Secondary Hæmorrhage—Death.*—John Wygal, 11th Va., Company F, about 25 years, of weak constitution, temperate; wounded at battle of Williamsburg, May 5, 1862, by bullet which entered just below middle third of right clavicle, coming out on back of right arm about four inches from top of shoulder. Entered hospital, May 12th. Secondary hæmorrhage occurred about the 21st of May, from anterior wound. A plug and compress were used, which were left for about three days, and then removed. On the 28th, another hæmorrhage took place, and again the wound was plugged; patient very weak. Slight hæmorrhage on the 29th. Death took place May 30, at 3 A.M.

Case III.—*Compound Fracture of Femur—Resection—Death.*—Robert Maines, 70th N.Y., Co. F, about 30 years, strong constitution, wounded at Williamsburg, May 5, 1852, which comminuted left femur badly. The operation of *resection* was performed. Saw patient first, about 20th of May. (He entered hospital on 11th.) Wound looked very bad, but improved after a few days; in a short time, however, it became much worse. The whole thigh was involved in inflammation. He lingered in great pain to the 31st of May, when he died.

Case IV.—*Wound of Leg—Pyæmia—Death.*—William Loomis, 2d Mich., Co. K, about 23 years, healthy, temperate; wounded at Williamsburg, May 5, 1862, by bullet, which entered the right leg about an inch and a half to the inside of the patella on a level with its apex, coming out behind about two and a half inches below the joint in centre of leg, passing through head of tibia close to its articular surface; joint thought to be uninjured. Entered hospital May 11th. The pus burrowed deeply both on inside and on outside of thigh to within two or three inches of trunk. Patient died of pyæmia on the afternoon of Wednesday, June 4

Case V.—*Wound of Arm and Diaphragm—Death.*—Charles Bartley, 104th Pa., Co. B, about 32 years, wounded at the Battle of Fair Oaks, May 31st—June 1, 1852, by a ball which passed through left arm and entered left side over the tenth rib, wounding diaphragm and lodging somewhere in thorax or abdomen. Patient suffered from hiccough attended with vomiting for several days before he died. Death took place on June 11th. (He entered hospital June 3d.)

Case VI.—*Wound of Diaphragm—Death.*—Jonathan Baker, 61st Pa., Co. F, about 40 or 45 years; wounded at Battle of Fair Oaks, May 31st—June 1st, by a buckshot which entered left side over tenth rib wounding diaphragm, and lodging internally exactly as in the preceding case. Patient suffered from constant hiccough, but vomiting did

not show itself. Died June 19th. (Entered hospital June 18th.)

Case VII — *Wound of Lung—Recovery.*—Patrick Early, 9th Ala., Co. B, aged 40 years, healthy, temperate; wounded at battle of Fair Oaks, June 1, 1862, by bullet (probably a Minié) which entered left breast between 3d and 4th ribs and about one and a half inches from median line, passing through lung and coming out between 4th and 5th ribs, just anterior to lower angle of scapula (left). He bled profusely when wounded, and lay on the field for twenty-four hours. Entered hospital June 4th, very low; it was thought that he would live but a short time. His condition was owing principally to the fatigue of the journey. There was extensive emphysema, a little cough, and slight discharge from the wounds, but no symptoms of pleurisy or solidification of lung. He had spit some blood before entering the hospital. Linseed poultices were applied to the wounds for two or three days, when the discharge from anterior wound became profuse; the posterior wound discharged very little, and commenced healing early. After three or four days the cough became troublesome, causing the anterior wound to discharge very freely. An expectorant and anodyne mixture was given with little or no effect. At this time, and subsequently, simple cold water-dressings were used. Patient raised some blood; very little, however. After this no medicine was given except a little morphine at night, and something to open the bowels occasionally. On the 6th of July, and for two or three weeks previous, air was forcibly expelled from the anterior wound upon the patient's coughing. Patient got out of bed on the 6th of July for the first time, for exercise, and on the 8th (to-day) he is walking about the hospital. From the first, he could not be kept quiet, but would sit up whenever he felt like doing so, and that was very often. There has been no pleurisy nor soli lification.

Case VIII.— *Wound of Lung—Recovery.*—Samuel Lager, 8th Penn. Reserve, Co. G, aged 31 years, healthy, temperate; wounded at Gaines Mills, June 20, 1862; he was standing at the time. Ball entered the right breast between 4th and 5th ribs, and about one and a half inches from the median line, coming out between the 4th and 5th ribs, same side, about one and a half inches behind posterior boundary of the axilla. Entered the hospital June 29th, in bad condition, spitting blood: there was extensive emphysema, solidification of posterior lobe of right lung, some pleurisy, with slight amount of effusion into pleural cavity. He has improved steadily, and to-day is doing well.

Case IX.—*Extensive Wound by Shell—Recovery.*—James C. Reynolds, 5th N. J., Co. E, aged about 24 years, wounded at battle of Williamsburg, May 5, 1862, by a large piece of shell, which made a wound in the gluteal region, left side, eight or ten inches long, and four or five wide, exposing the trochanter major. On the 8th of May, Dr. Jas. R. Wood removed part of the trochanter. Entered hospital May 11th, improved steadily, and on June 8th was sent to the hospital at Philadelphia.

Case X.— *Wound of Face—Fracture of Superior Maxilla —Recovery.*—S. D. Mills, Co. D, 7th Va., aged 32 years; healthy, temperate, wounded at battle of Williamsburg, May 5th, by a bullet, while in the act of firing. Ball entered the mouth, slitting the upper lip a little to the left of the centre, and came out at a point about one inch below, and two inches anterior to, the lower part of the left ear, comminuting the left superior maxillary bone, and carrying away five or six upper teeth. Saw patient first at Williamsburg, on or about the 10th May; then the face was very much swelled. Patient entered hospital May 12th, and has been here ever since; for a long time he has been acting as nurse. Several pieces of bone have come away. External wound discharging yet—that is the wound on the cheek; the lip has healed, leaving very little deformity.

Case XI.— *Wound of both Legs by one ball—Recovery.*—G. W. Sumey, Co. L, Palmetto Sharpshooters, S. C., aged 29 years; healthy, temperate. Wounded by a Minié ball at battle of Fair Oaks, May 31, 1862, while in the act of loading. Ball entered outside of left leg, at junction of lower with middle third, passing upwards and inwards between the bones, making its exit on inside of same leg, at junction of middle with upper third, and then entering the inside of right leg, at junction of middle with upper third, comminuting tibia, and lodging in it a short distance below the point of entrance. Entered hospital June 3d. Ball removed two or three weeks afterwards. Left leg healed readily; the right suppurated freely, and was as freely opened; wound in right leg finally becoming about five inches long. Pieces of bone were removed at different times. Linseed poultices and wet lint dressings were used. Bone was freely exposed, the bone granulations showing beautifully. Amputation was thought of at one time. Leg was slung by means of anterior splint and frame. July 16th.—Patient in fine condition; wound doing well, partial union of bone having taken place.

Case XII.—*Entrance of Ball in the Back, and Exit from Abdomen—Recovery.*—Wm. Pullen, Co. I, N. C., aged 26 years; healthy, temperate. At battle of Hanover Court-House, May 27th, 1862, while stooping to pick up musket, was wounded by a Minié ball, which entered at the fourth lumbar vertebra, about one inch to right of spine, and was cut out on abdomen about three inches to right of umbilicus. Patient remained at farm-house near the field, till June 15th, having been told that he would live but a short time. Entered hospital June 18th. Water dressings were used. Partial paralysis of right leg since receipt of injury, with pain sometimes severe in hip, knee, and thigh; besides these, there were no bad symptoms whatever. July 10th, patient walking about hospital on crutches. July 16th, well.

Case XIII.—*Fracture of Scapula—Recovery.*—Albert K. Ingraham, 10th Mass. band, aged about 38 years; healthy, temperate. Wounded at Fair Oaks, May 31st—June 1st, by a piece of shell, which entered at about the centre of spine of left scapula, comminuting scapula terribly, and came out directly over the spine, at about the seventh or eighth dorsal vertebra. The upper wound was triangular, and covered an area of at least five or six square inches; the lower wound was a clean vertical cut, about four inches in length. Entered hospital June 3d. Linseed poultices were used, and the wounds were thoroughly cleaned with tepid water, containing a very little solution of chloride of soda, twice a day. Patient improved steadily, and on June 18th was well enough to be sent home. Several pieces of the scapula were removed. Heard from patient after his arrival home (Mass.); he was nearly well—able to walk half a mile, or more.

American Pharmaceutical Association.—The adjourned meeting of the Association which was to have been held last year at St. Louis, and postponed in consequence of the disturbed condition of the country, will be held at the city of Philadelphia, on Wednesday the 27th of August next, at 3 o'clock P.M.

Barbarity at Pittsburg Landing.—We were greatly pained, as we passed along the road traversed by thousands, to see dead bodies lying in the mud of the path, day after day. They were privates cast off from the boats or thrust out of the tents to which they had been taken when wounded, and where they had died. Some of them were bodies of rebels. Their open eyes and gradually blackening faces were a horrible sight, especially amid the crowd which always hung about the landing. After remonstrating with several officers, on the inhuman practice and its bad effects on the soldiers, who saw how little they were cared for when dead, we succeeded in having them buried. A very similar scene was still in view when we left, at the log hospital on the hill, where was a pile of amputated limbs, just outside the back door! An admiring officer assured us, as we sorrowfully gazed, that it was the result of the labor of Dr. —— within, the famous operator from Ohio. We hope the trophies of his skill will not much longer be publicly exhibited.—*Chicago Sanitary Commission Report.*

Reports of Societies.

MEDICAL AND SURGICAL SOCIETY.

DR. T. M. HALSTED IN THE CHAIR.

MEDICAL AND SURGICAL CASES.

STATED MEETING, June 1, 1861.

NEURALGIA FOLLOWED BY SUBACUTE INFLAMMATION.

DR. BUMSTEAD related a case of neuralgia of the face and head, which proved fatal, with symptoms of subacute meningitis. The patient was a nervous female, who was confined last November. After her confinement she became much enfeebled, and began to suffer from neuralgia of the face and head. This was ineffectually treated with large doses of quinine, and with quinine and iron combined. Occasionally the neuralgia was accompanied with nausea and vomiting. She passed from the care of Dr. Bumstead into the charge of a homœopathist, and about two weeks since was seized with convulsions and died. No autopsy was obtained.

EXCISION OF NERVE IN NEURALGIA.

Dr. MARKOE related the case of a clinical patient on whom he operated for tic-douloureux, by the removal of a portion of the inferior dental nerve. The man had suffered during a period of ten years, several attacks annually. During the past two years his sufferings have been almost without cessation, and aggravated occasionally by very severe paroxysms. Section of the supra-orbital nerve had produced little or no effect; the mental nerve had also been divided without relief. The pain had lately become localized in the mental and dental branches—occasionally radiating to upper branches. A removal of a portion of the dental nerve was advised. This operation was performed. The bone was laid bare and chiselled so as to expose the canal of the inferior dental nerve. One inch of the nerve was removed. It seemed congested and considerably hypertrophied, but microscopic examination did not detect any change of structure. The relief of the pain was almost immediate. He has had but one slight paroxysm of pain since the operation, six weeks ago, and is now well enough to return to his occupation. Dr. Markoe thought the case remarkable for the rapid subsidence of pain after the operation. The sensibility of the jaw is being gradually restored.

Dr. PARKER, in connexion with the discussion that followed, related a case where he removed an inch and a half of the posterior tibial nerve for neuralgia, affecting the ramifications of this nerve in the foot. The pain subsided for a time after the operation, but returned. The limb was then amputated. The specimen, which is now in the museum of the College of Physicians and Surgeons, shows that the continuity of the nerve was restored after the operation, either by the formation of nerve or of substance capable of performing the function of nerve.

FIBROUS INFLAMMATION RESULT OF PRESSURE.

Dr. ALLIN detailed the history of a man thirty-five years of age, living on Long Island, who, about two years ago, fractured both bones of the leg near the ankle-joints. The foot was bound so tightly to the foot-board of Amesbury's splint, by the surgeon who attended him, that it caused him great pain. The surgeon refused to loosen it, and the patient himself finally cut the bandages and found the integuments of the foot of a livid hue; no sloughing followed however, and union was effected without deformity. Ever since the removal of the bandages he has suffered constant and intense neuralgia, just below and behind the external malleolus. The pain is never paroxysmal, but constant, and the tenderness is exquisite. There is slight puffiness of the part, and the pain is aggravated by twisting the ankle.

Some discussion arose as to the cause of the pain in this case: the general opinion seemed to be that it was not properly neuralgic, but dependent upon fibrous inflammation.

Dr. PARKER alluded to a similar case, where the pain was located above the ankle-joint, and where complete and permanent relief followed a free subcutaneous incision at the seat of pain.

ACCIDENTAL BREAKING OF CATHETER IN URETHRA.

Dr. BUCK related the following history. A woman, æt. thirty-five, who had been dependent for some time on the use of the catheter for the relief of the bladder, recently, by the accidental breaking of the silver catheter she was using, lodged two inches of it in her bladder. Dr. Buck, soon after the accident, searched for it with a slender pair of dressing forceps, and failed to extract it. The following day he made a second attempt with the small urethral forceps and failed again. He resorted once more to the dressing forceps, and succeeded in securing the piece by the end so as to withdraw it without difficulty.

STRICTURE OF RECTUM.

Dr. BUCK also related a case of stricture of the rectum. The patient was a woman, æt. twenty-four, of healthy appearance. On examination per rectum, he discovered about two inches above the anus an annular stricture, not scirrhous in character. Per vaginam he found a firm fibrous tumor, of even contour, in the posterior cul-de-sac: he could sweep with the finger almost the entire circumference of this tumor, and it was slightly movable. The woman suffered occasional bearing-down pains, and the stools were hard and difficult. On distending the anus with a speculum, the stricture was readily observed. This was divided anteriorly and posteriorly, and by tearing the tissues the finger was carried well above the stricture, so as to reveal the fact that the supposed fibrous was in reality a fæcal tumor. The woman had never had dysentery.

STATED MEETING, Sept. 20, 1861.

INSIDIOUS PROGRESS OF RENAL DISEASE.

Dr. ELLIOT related a case illustrating the slow and insidious progress of renal disease. A gentleman applied to him seven years ago to get medical counsel as to the propriety of his undertaking some work that would involve considerable mental as well as physical labor. A thorough physical examination was made. The urine was found to contain oxalate of lime, and on one occasion one or two desquamative casts were observed. Since that period his health has been very good and is now, but a morning specimen of urine exhibits a specific gravity of 1004, which Dr. Elliot regards indicative of renal disease. Dr. Elliot has several times observed cases where repeated examination of the urine has failed to show albumen, and yet careful microscopic examination has detected casts of the renal tubes.

Dr. BULKLEY alluded to a case of anasarca which had been under his observation for some time, which he believed to be dependent on renal disease. Two months ago the anasarca had nearly subsided, and since then the patient has suffered only from occasional gastric derangements. The urine maintains a specific gravity of 1010, but Dr. B. has never been able to detect either albumen or casts.

Dr. BULKLEY related another case where he first suspected renal disease from a persistently rapid pulse and œdema of the feet, in a gentleman he examined for life insurance; he could not, however, find casts or albumen in the urine. There was no cardiac disease. Last winter the patient had an acute febrile attack, during which the urine was examined and found to contain albumen, blood, and casts. His general condition is now good, though he still has some œdema of the feet.

MISCELLANEOUS CASES.

Dr. POST recalled the attention of the Society to a case

related last winter, in which he operated upon a child four years old for a cicatrix from a burn which deformed the hand and arm. The flaps sloughed extensively after the operation, but the child has recovered at the end of eight months, with a straight arm, and with the functions of hand and arm perfect.

Dr. Post also related a singular case of pelvic tumor, occurring in a lady, forty-nine years of age, who had suffered for some time from obstinate constipation and severe abdominal pain. On examination per rectum, a tumor was detected which consisted in an intussusception of the lower portion of the descending colon, and the margin of the invaginated portion seemed to be of a scirrhous nature.

Dr. Post related a third case. A woman, æt. twenty-seven, presented herself at the clinic, having a tumor the size of a walnut on the palmar surface of the middle finger, very firm and slightly movable, supposed to be enchondromatous in character. It was found to be attached to the sheath of flexor tendons, and a number of smaller tumors were found below it and between the flexor tendons, and some of these were attached to the synovial membrane of the first phalangeal articulation. The patient did well after the operation, and the case illustrated the slight consequences that sometimes follow wounds of synovial cavities. A fourth case was alluded to by Dr. P., one of enlarged bursa underneath the patella, through which he passed a filiform seton. The seton was removed at the end of six days, some suppuration occurring in its track. Afterwards too violent exercise brought on severe inflammation, which terminated in suppuration and recovery.

American Medical Times.

SATURDAY, AUGUST 9, 1862.

COMMISSIONERS OF HEALTH.

"The Board of Commissioners of Health have applied themselves most industriously and conscientiously to the sanitary interests committed to their charge, giving prompt attention to every complaint, and guarding with zeal and efficiency the public health." MAYOR OPDYKE.

It has been well said of the Commissioners of Health that they "perform the same relative service in regard to the public health, as would a fifth wheel in the progression of a coach." Of all the organizations which exist under our present Charter for the ostensible purpose of protecting and improving the public health, this body seems not only the least important, but absolutely superfluous. The City Inspector's Department has "cognizance of *all* matters affecting the public health" according to the Charter. On this authority, therefore, would seem to rest the burden of real health preservation.

The principal duty assumed by the Health Commissioners is the supervision of the Quarantine. There is here a wide field for useful labor, did they but apply themselves industriously and conscientiously to the interests committed to their charge. It is but too well known that gross abuses have always existed in the management of our Quarantine; although the Commissioners of Health, over whom the Mayor presides, and whom he so unqualifiedly praises for devotion to duty, have supervision of its affairs. The confidence of the public in that Board, never strong, has been greatly weakened by its recent action which sent yellow fever afloat in this community. Every effort to explain away this grossly inconsistent act, by alleging a correct intention, or an industrious and conscientious application to the sanitary interests committed to their charge, will not palliate the offence. A violation of law in that particular was equivalent to violating it in general.

But are the Health Commissioners at the present time guarding Quarantine against all abuses? Are they to-day sedulously protecting this city from an invasion of yellow fever? If we accept the intimations of the Richmond *Co. Gazette* this body is negligent of its duties, and allows the Quarantine to be so managed as to render the occurrence of an epidemic of yellow fever this summer, not improbable. Vessels are allowed to come to the upper Quarantine station with yellow fever on board, and, immediately after the removal of the sick, the vessel has discharged its cargo at our wharfs. Is this guarding the public health with zeal and efficiency? Such recklessness and utter disregard of the sanitary interests committed to their charge cannot be too severely reprobated.

There is no proposition which the citizens of New York will receive with greater incredulity than that any one of the multifarious health organizations which curse this city, applies itself most industriously and conscientiously to the sanitary interests committed to its charge, giving prompt attention to every complaint, and guarding with zeal and efficiency the public health. The conviction is firm and rooted in the popular mind, that all of these organizations are subservient, not to the public interest, but to the interests of individuals, or of party. And this conviction is not based on any trivial circumstance, but has been the growth of years of observation of the grossest official malfeasance. They have seen a terrible epidemic approach the city with steady step, but no barrier was raised to stay its progress because the proper authority did not dare to call together its Board of Health, justly esteeming the latter more dangerous to the public health than the former. They have groaned too long under the enormous burden of taxation imposed by that clique, comprising the City Inspector's Department, and for which they have received filthy streets, epidemics of small-pox, scarlet fever, cholera, and similar diseases, to believe that a conscientious feeling ever inspired one of its members. And it will require something more than mere assertion to make it evident, that the Health Commissioners do little else than give official sanction to the extortions of the Health officer.

MEDICAL MEN AS CORONERS.

On the death of Mr. Wakley of London, the Coronership of the County of Middlesex became vacant. This office he had held for more than twenty years, having first succeeded in an election after a long contest with legal candidates. He maintained that medical men are the only qualified incumbents of this office, and in his subsequent administration of its duties, he fully sustained his original proposition. The election of his successor has just occurred, and we take pleasure in stating that Dr. Lankester, a gentleman of the highest respectability in his profession, is the successful candidate.

We have endeavored to awaken the attention of the profession in this country to the importance of securing the election of a qualified medical men to the office of Coroner. As yet, however, little regard is paid by the profession to the claims which this office has upon it, and in consequence

it is generally filled by some political aspirant, totally unqualified to discharge its duties. There is a prevailing impression in the community, that a Coroner must be a doctor, perhaps, because he deals with the dead, and therefore for the time being the incumbent often prefixes to his name the title, M.D. If the profession would take advantage of this fact, and manifest proper interest in the election of competent medical men to this office, they could readily accomplish their object. If, however, we attempt to place medical men in this office we must enter the arena of party strife, and secure our ends by those measures which are legitimate in political contests. Medical candidates should be put forward who will command the respect and support of community, and they should be sustained by a united profession. If this is done there is not a community in this country which could not elect a qualified medical Coroner. In the recent contest which resulted in the election of Dr. Lankester to the Coronership of Middlesex, the medical men of the district unitedly gave him their assistance. We find among his active supporters in the canvass, Sir James Clark, Sir Charles Locock, Dr. C. J. B. Williams, M. Paget, and many other medical men of the highest respectability. They succeeded, and the result of placing so competent a person in this position will be, aside from the interests of justice, that the office of Coroner will become daily more respectable, and eventually only qualified medical men will be nominated for the place.

As an example for us, and at the risk of shocking those *respectable* brethren who have such a dread of the epithet, "political doctor," we insert Dr. Lankester's last call upon the profession for support, and the names of a few of the more prominent contributors to his electioneering fund.

TO THE MEMBERS OF THE MEDICAL PROFESSION.

Gentlemen:—As this is probably the last time before Election that I shall have an opportunity of addressing you through the medical press, let me urge upon you the continuance of your efforts on my behalf. The present contest is not only one between the choice of a medical or a legal man for Coroner, but between myself and skilful, practised, and unscrupulous electioneering agents. I look to you, who have known me for twenty-five years, to protect me from the cowardly and dastardly attacks of my opponents, and by your personal efforts on my behalf, now and on the polling day, to vindicate my character and that of your profession by doing all that you can to place me at the head of the poll. I would remind those who have promised me their personal assistance on the polling day, that it is of vital importance that their efforts should be made EARLY, and that they should endeavor to bring their friends to the poll directly it opens at 8 o'clock in the morning. Be up and EARLY at the poll.

I am, Gentlemen,
Your most obedient servant,
EDWIN LANKESTER, M.D., F.R.S.

8, Savile Row, W., June 26th, 1862.

DR. LANKESTER'S ELECTION FUND.

List of Subscribers. T. H. Wakley, Esq., Spencer Wells, Esq., Dr. Tyler Smith, W. Bowman, Esq., F.R.S., Dr. C. J. B. Williams, F.R.S., Lionel Beale, Esq., Dr. Dundas Thomson, F.R.S., R. Quain, Esq., F.R.S., Dr. Neil Arnott, F.R.S., Dr. Richard Quain, Dr. Barlow, Henry Thompson, Esq., Dr. Sharpey, John Churchill, Esq., J. Paget, Esq., Dr. Brown-Séquard, Dr. Forbes Winslow, Dr. Henry Bennet.

D. Ellerslie Wallace has been elected to the Chair of Obstetrics and Diseases of Women and Children in the Jefferson Medical College, Phila.

THE WEEK.

It is not surprising that illiterate persons should regard "scientific ventilation" as of no account. They are too often unable to appreciate the value of good ventilation, either from habits of living, or from an obtuse sensibility of their organs of special sense. But it is surprising that a man of refinement, and having a medical education, and above all, devoting his attention especially to hospital construction, should venture the assertion that he has "very little faith in what is called 'scientific ventilation.'" But such is the assertion of Mr. Charles Hawkins, of London, who is spoken of as the best qualified person in that city to advise in the construction of hospitals. His plan of ventilation is by windows. He thinks the ventilation of a hospital is a very simple matter. If Mr. Hawkins is a fair exponent of the state of hospital architecture in London, there can be no doubt that it is still sadly deficient. Scientific ventilation is not a failure in this country, but has been carried to such perfection that the building of public edifices with only windows for ventilation, is now simply criminal. Windows arranged according to Mr. Hawkins's plan, will answer very well in summer, but they are almost valueless in winter. The method of Dr. Griscom, of this city, by means of tubular shafts, increasing gradually in diameter from basement to garret, on the principle of the circulation of venous blood through vessels of increasing calibre, will, we believe, prove of incalculable advantage. It has already demonstrated the fact, that "scientific ventilation" is not a failure.

At a late meeting of the Scoharie Co. Medical Society (N. Y.), the President, the Hon. William Lamont, M.D., one of the most intelligent members of our last Legislature, made the following allusion to the efforts of the Homœopaths to obtain a foothold in Bellevue Hospital, during the winter:—

"I may here with propriety allude to a single circumstance. A petition signed by about fifteen hundred persons, was presented to the Medical Committee—of which I had the honor of being a member—in the last Legislature, urging that one-half of the wards of Bellevue should be appropriated to the service of homœopathic practitioners. A voice came from the patients of the wards of Bellevue, from those who were immediately interested in such a step. Out of eight hundred patients in several wards, all but two petitioned the Medical Committee that no change should be made. 798 against 2. Such, gentlemen, is the relative value of Homœopathy unshorn of its trappings. But a voice came from the people of New York in a remonstrance so emphatic that it became useless for the Committee to make any report at all.

The floating hospital, *Nightingale*, at the Quarantine of New York, will prove, beyond a doubt, the value of hospital ships for quarantine purposes. This vessel was first arranged for hospital purposes about three years ago, and placed in charge of Dr. Harris. Many improvements were made by him in its interior arrangement, and it served its purpose admirably during that season. It has since been in charge of Dr. Bissel, a former resident physician at the Marine Hospital, until quite recently, when the Commissioners of Quarantine appointed Dr. A. N. Bell, of Brooklyn, as its Medical Superintendent. This appointment is a novelty in the history of Quarantine, as it has put the right man in the right place. As a former surgeon in the Navy,

with practical experience in the treatment of yellow fever, and an intimate knowledge of the regulations of quarantine, Dr. Bell has a combination of qualifications for this position which few if any other physician, possess. Under his supervision the Floating Hospital is now a model of neatness, and is in every respect, apparently, perfect in its appointments for the sick. We believe the *Nightingale* is a permanent institution, and we trust it will always have as well qualified a medical superintendent as it has to-day.

—

The efforts that have been made to establish a hospital in the Central Park are to prove a failure, through the vetoes of the Mayor. Though this is one of the most suitable localities within the limits of the City for a hospital for disabled soldiers, yet we do not regret the failure to open another hospital in this city. It is entirely improper to locate military hospitals in cities for the two-fold reason, that they become centres of infection to the inhabitants, and that they render the convalescence of the patients tedious and prolonged. We cannot, on this account, conceive a more impolitic act than the opening of permanent military hospitals in New York. In the immediate vicinity are not only most salubrious sites, but at Staten Island there is a hospital building thoroughly prepared, even to the selection of nurses and physicians, for the immediate reception of patients; and yet, not a patient is allowed to enter it. But, almost daily, the sick with fevers, and the wounded, are trundled through this city to the hot and stifling wards of the hospitals opened in our midst. This policy should be changed for the benefit of the sick; but if not, the occurrence of a devastating epidemic in some of the large cities, springing from these centres of infection, will lead to the summary closure of all depots of sick soldiers in cities.

—

The *Richmond Co. Gazette* affirms that the defeat of the Health Bill, last winter, was not entirely the work of Mayor Opdyke, but that Dr. A. N. Gunn, Health Officer of this port, aided and abetted the Mayor in his shameful work. It says:

"We don't blame Dr. Gunn so much as Mr. Opdyke, if at all, seeing that he had a motive, which, leaving supreme selfishness out of the question, might be called a candid one. His pocket was in interest to defeat the Bill for at least another year, should his good luck in drawing the prize of rich office continue under the next Governor, as it has for four years under the present. Dr. Gunn would have received under the Bill about $10,000 for the year. By its defeat, he is secured in $30,000 in gross, and at least $20,000 or $25,000 net revenue."

Reviews.

Quinine as a Prophylactic or Protective from Miasmatic Poisoning, a Preventive of Paroxysms of Miasmatic Diseases, together with some remarks upon its use in the Treatment of Developed Miasmatic Diseases. By Stephen Rogers, M.D., formerly Assistant Physician to the Island Hospital, New York, and Surgeon to Panama Railroad Company; Licentiate of the Royal University of Havana, Cuba, etc. Albany: 1862. Pp. 24.

Dr. Rogers, who has had excellent opportunities to study miasmatic fevers and their treatment, has given in this pamphlet a detailed account of his experience in the use of quinine as a prophylactic. His views are embraced in the following propositions:—

"*First*—When men are to be sent into miasmatic localities, either from ships or from land forces, a dose of quinine sufficiently large to produce some appreciable evidence of its action, should be taken by every one before entering such locality, and should be repeated once in twelve, and in some cases once in eight hours (which it will be the physician's duty to ascertain and prepare for) during the time spent there.

"*Second*—That removal from a miasmatic atmosphere for any twelve hours, and especially during a night, is quite equivalent as a protective, to one dose of quinine; it may be much more economical, and when practicable, is by far the most desirable protective measure.

"*Third*—That in all cases where this measure can be daily practised, it will unquestionably preserve the susceptibilities of the brain to the action of the medicine, for an indefinite and probably long period, and will thus serve indirectly as a most efficient protective.

"*Fourth*—That officers and chiefs in command, should by all means avail themselves of the advantages to be derived from such intermissions in exposure, and thereby maintain their susceptibility to the quinine more or less unimpaired. By so doing, the loss of their important services would be rendered much less liable, and the consequent embarrassment to operations would almost surely be avoided.

"*Fifth*—That when continuous exposure is inevitable, there is no safety in attempting to protect from infection by the use of quinine, for a longer time than two months, and as a general rule, it is not advisable for longer than one month.

"*Sixth*—That ceasing its administration at this period, by the time the infection takes place, and the premonitions appear, the susceptibilities to the medicine will have become so restored that it will be practicable generally, to prevent the paroxysms for long periods of time.

"*Seventh*—That as quinine is a stimulant, with specific action in all conditions of depression or exhaustion from miasmatic poison and miasmatic disease, it is indicated in all cases, irrespective of the state of the skin, when the unaided powers of life are likely to be unable to restore to healthy action within the time required to avoid a renewed attack, and also when there may be danger that the vital forces will be overwhelmed by the poison in the onset of the disease, and that when so indicated, it should be promptly and efficiently employed, either by the stomach or rectum, as the case may demand.

"*Eighth*—That by an observance of these rules, and by avoiding the causes of other diseases, most men of even ordinary constitutions, can be kept in miasmatic localities for years, in an efficient state of health."

Correspondence.

THE NECESSITY FOR MILITARY MEDICAL TEACHERS.

[To the Editor of the American Medical Times.]

Sir:—Perhaps there is no subject connected with the present campaign occupying so universally the public mind as the health and safety of the soldier in the field; no more pleasing evidences of this are necessary than the multifarious, universally and lavishly contributed gifts placed at the disposal of the Sanitary Commissioners. The philanthropy of our friends at home requires no stimulation, as the number of self-sacrificing volunteer lady-nurses, surgeons, physicians, and others in our hospitals sufficiently testify.

There exists indeed, on the part of the Government and public, no limit or hesitation as to *doing* or *giving*, so that the suggestion of *what* ought to be done, *what* sacrifices made, seems to be the only indication requiring attention.

With this view I am tempted to offer the following hints, which I trust may be thought of sufficient moment to merit insertion in your valuable journal.

Somewhat extended experiences as a military medical officer, although obtained under circumstances involving no inconsiderable amount of personal discomfort, privation, and danger, will, nevertheless, not have been thrown away if they may only subserve the purpose of increasing the usefulness of the Army Surgery.

An army of such immense proportions, raised, equipped, and prepared for the field, so rapidly as this has been, must necessarily labor under many disadvantages to which older organizations are not liable; amongst these disadvantages it was imperative that surgeons should be appointed, better men than whom, under the circumstances, it would have been impossible to obtain, but who, as a general rule, had not previously given their attention to military surgery, or, at the best, had but hurriedly made themselves acquainted with the subject, and who, consequently, could not be expected to move in their new grooves with the most perfect aptitude.

A close observation of the working of the medical departments of at least three European armies leads me to think that the advantages of military surgery forming a part of the preliminary education of the army surgeon, cannot be over-estimated. The requisite means for acquiring this knowledge doe not, however, appear to be available to the desired extent in this country. This subject, which in European countries is recognised as all-important, should, I think, receive prompt consideration, and particularly if we shall in future be obliged to maintain a much increased standing army. Such an addition to the usual programme of medical instruction is rendered even more imperative than a casual observer might at first imagine, it being not alone advisable for the benefit of the service in a purely surgical point of view, but also, and in a still greater degree, as tending to insure more perfectly the sanitary requirements of camp life, involving all those hygienic and prophylactic measures, which are admitted by all authorities to be of such paramount importance.

And though aware that the well educated practitioner in civil life is acquainted with the more general and salient means of insuring these conditions, yet I know that it is alone in the theatre of the military professor that the subjects are sufficiently enforced. It is true, that in systematic works, these matters are all laid down circumstantially enough, but in my mind it requires *oral* instruction to at all adequately convince the student of their true importance.

To those who have carefully watched the insidious approaches and rapid development of those diseases to which large encampments are obnoxious, the greatest amount of caution will not appear unnecessary, and I know not the means by which a student can so thoroughly imbibe the requisite amount of watchfulness and caution as from the lips of his teacher, who, unlike books, will from mere repetition be sure to fix the impression which he seeks to make.

What I would then suggest is, that hereafter thorough information on all matters which Military Surgery professes to teach shall be required of every candidate for admission into the medical department of the army. That a chair of Military Surgery be instituted at each of the Universities or centres of medical education, and that every candidate for a medical appointment in the army shall have attended at least one course of lectures on the subject.

Francis Reynolds, M.D.,
Fellow and Licentiate of the Royal College of Surgeons, Ireland, late Assistant Surgeon in British Army during Crimean War, Surgeon 88th Regiment N. Y. V., Meagher's Brigade, etc., etc.

OAKUM AS A SUBSTITUTE FOR LINT,
IN GUN-SHOT AND OTHER SUPPURATING WOUNDS.

[To the Editor of the American Medical Times.]

Sir:—I have for many years past been in the habit of using picked oakum, in all cases of suppurating wounds, particularly in connexion with opened joints, where the suppuration is excessive. The great number of gunshot wounds now in Bellevue Hospital, where I use it entirely to the exclusion of lint, has furnished an opportunity for a number of army surgeons to examine its advantages, and they have requested me to make the subject more generally known to the profession through the medium of your valuable medical journal.

One of the objects of lint applied to a suppurating wound, is to absorb the discharge; now as most of the lint is composed either entirely or in great part of cotton, it acts more like a tampon, or a retainer of the secretions, than as an absorber.

If you will take a bale of cotton and immerse it in the river for one month, or even longer, and then remove it, you will find on opening it that the cotton in the centre of the bale is perfectly dry, thus proving that it cannot be soaked through any great thickness, or that it will not absorb moisture. So, when placed over a suppurating wound and left for some hours, it will be found perfectly dry except at the point of contact: acting, in fact, like a bung in a barrel, or a cork in a bottle—to *prevent* the escape of the pus—which necessarily burrows in different directions, thus forming extensive abscesses, and adding greatly to the danger of the patient; and when removed, the pus will gush out in large quantities. Now, if you place picked oakum over these same wounds, you will find after the same number of hours, that the oakum is perfectly saturated with pus, and the wound itself almost perfectly dry and clean—the oakum acting like a syphon, and discharging the contents of the abscess by capillary attraction.

It is necessary to place under the wound a piece of india-rubber cloth, or oiled muslin, for the sake of cleanliness; and in case of much inflammation, by simply wetting the oakum in cold water, and wrapping the oiled muslin around the limb, or wounded part, so as to exclude the air, you have at once the neatest and most comfortable poultice that can be applied to it. In gunshot wounds, which go through and through a limb, particularly if made with the "Minié ball," the whirl or screw of the ball entangles in its thread the muscular fibres and cellular tissue, and separates them from their attachments for a long distance from the real track of the ball itself.

As the muscle and tegumentary tissues are more freely supplied with blood-vessels than the fat and cellular tissue, the consequence is that they begin to granulate much more readily than those other tissues, and will thus often close up the wound, and prevent the free escape of pus, before those parts have perfectly healed, and thus lead to the formation of extensive secondary abscesses. I, therefore, in all cases where no blood-vessels prevent it, pass an eyed probe through the wound and draw through it a few fibres of the oakum or tarred rope, which keeps it perfectly free, and the tar is a very excellent antiseptic, and removes all unpleasant odor.

A few fresh fibres are twisted on the end of the seton at every dressing and drawn into the wound, and the soiled piece cut off and removed with the dressings.

Another great advantage which the oakum possesses over lint, which in these times of heavy taxation is not to be overlooked, is its cheapness. Lint at the present time costs from $1.25 to $1.35 per pound, whereas the finest picked oakum can be obtained at the "Empire Oakum Works," No. 149 West 39th street, for ten cents per pound. And if it were universally adopted in the army it would save many thousands of dollars to the Government, and I confidently believe the life of many a soldier. And no surgeon who has once used it will ever resort to lint again—particularly if the lint is made of cotton.

Yours, etc.,
Lewis A. Sayre, M.D.,
Surgeon to Bellevue Hospital, etc.

August 7, 1862.

A REMEDY FOR MAGGOTS.

[To the Editor of the American Medical Times.]

Sir:—Having read in the "Lessons of the Surgery of the War," published in your Journal of the 26th ult., of great trouble experienced from the wounds of soldiers becoming infected with maggots, I am induced to lay before your readers a simple remedy which once proved effectual under my observation, in preventing this troublesome and disgusting complication.

It is an ointment made by cooking the shoots and tender leaves of the common elder in lard. It therefore differs from the *unguentum sambuci* of the London Pharmacopœia, which directs the flowers as the part of the plant to be used. With this ointment the parts are to be dressed and the splints smeared.

I learned its value during the treatment of a severe case of compound and comminuted fracture, with wounds of the arm. Like the author of the paper referred to, I had tried a multitude of remedies against the unwelcome intruders, but without avail. An "old woman" urged a trial of the ointment now proposed, and it proved at once perfectly effectual, although used *without faith*.

This is the extent of my experience; no opportunity of testing its virtues again has presented itself. May I therefore express the hope that, as the remedy is everywhere to be procured, some of your readers will try it, and communicate to you the result.

J. C. R.

Dayton, Ohio.

FOREIGN CORRESPONDENCE.

LETTER VII.

THE INTERNATIONAL EXHIBITION.

By PROF. CHARLES A. LEE.

London, July 6, 1862.

There are numerous objects of great interest to medical men in the great International Exhibition, to which I propose to devote a few letters. The magnificent display of the products of nature and art from every part almost of the habitable globe, far greater than has ever before been collected in one place, would well repay an American for a trip across the Atlantic; and, apart from the natural scenery and geographical features of different countries, will teach the careful observer more in one week than would be learned by many months or even years of travel. I have devoted a week or more to the examination of the various articles, and feel that I have but just begun to know even superficially what is to be found in the great collection; to do the individual articles justice or examine them so as to be a source of profit hereafter, would require many months of careful study.

Let us first glance at the chemical and pharmaceutical products. These are chiefly contained in the Eastern annex. They may all be included under the heads of, Chemicals used in manufactures; fine chemicals and rare products; dyes, pigments, and varnishes; pharmaceutic alchemicals and drugs; and miscellaneous chemical manufactures. Under the first class may be included the various acids, iodine, phosphorus, alkalies and their compounds, alum, sulphate of copper, chloride and oxide of tin, nitrate of lead, chloride of gold, nitrate of silver, benzole, etc. *Amorphous phosphorus*, which is much harder and less inflammable than the ordinary form, is worthy of notice, inasmuch as its manufacture does not cause disease among the workmen, and the manufacture of Lucifer matches from it has just been introduced into England, although employed for this purpose several years past, I believe, on the Continent. In the matches made from it, the match-tip contains chlorate of potash, and the friction tablet on the box, amorphous phosphorus; and it is not till the two are rubbed together that combustion can take place, the two bodies when separate being incapable of becoming inflamed by friction. The peculiarity of these matches therefore consists in the separation of the two materials which by friction cause combustion. Amorphous phosphorus is only inflammable when rubbed in contact with chlorate of potash or black oxide of manganese; of course they do not ignite by any ordinary friction, and no danger arises from their being carelessly used or thrown about by children.

Splendid and numerous specimens of crystals of carbonate of soda are exhibited, some masses in nearly perfect rhomboidal prisms, many inches in length. The importance given to this substance is readily perceived, when we learn that there are now over fifty establishments in Great Britain in which soda is manufactured on a large scale by the decomposition of common salt with sulphuric acid, producing 3000 tons of soda ash per week; 2000 tons of soda crystals, 250 tons of bi-carbonate of soda, and 400 tons of bleaching powder also each week, the total annual value exceeding two millions sterling.

There are also beautiful specimens of the metal *sodium*, which until lately was a purely chemical curiosity, but now manufactured in large quantities as a commercial article, for the purpose of reducing aluminium from its compounds. It is silver-white; so soft at ordinary temperatures that it may be easily cut with a knife or pressed between the finger and thumb; melts at 194° F., and oxidizes rapidly in the air, inflaming when a few drops of water are added to it. But perhaps there is no more interesting display in the list of chemicals than that of the *Cave Products*, including *aniline* and its various salts, and aniline dyes. But before speaking of these, I may refer to a splendid collection of *bile products;* a piece of *iron* made from the blood of an ox; a specimen of the new metal *thal'ium*, lately discovered by means of *spectrum analysis* by Mr. Crooke; and specimens of *cæsium* and *rubidium* discovered in the same manner by Bunsen and Kirchoft. I have already referred to this subject in one of my former letters, but its importance perhaps deserves further elucidation. At a late meeting of the Royal Society I saw the subject beautifully illustrated by electric light, and a large solar spectrum by Professor Miller of King's College. If any salt of soda is burnt in a flame it gives a yellow light, and if a beam of this monochromatic light is passed through a prism it produces a well-defined series of red lines, lithium another set, and thus it is found that every substance produces its own peculiar spectral image. In this way the two new metals here exhibited, *cæsium* and *rubidium* (*cæsius*, grey—*rubidus*, red) were discovered in the alkaline waters of Durkheim, but in so small a quantity, that he evaporated down 500 tons of this water to get about 100 grammes of the chloride of rubidium, and 70 grammes of the chloride of cæsium; so that out of 44 tons of water, he got only about 200 grains of the mixed chlorides of these two new metals. Dr. Stenhouse exhibits a choice collection of the proximate principles discovered by him in the *lichens* and *algæ*, with other rare chemicals, the result of his own researches; while Dr. Church contributes a curious collection of the rare vegetable acids, such as *tolnic acid*, *suberic acid*, *pieric acid*, and their salts, with many others. Never before have I seen such large quantities of the *vegetable alkaloids* and their *salts*, as are exhibited by Mr. Hullc and Mr. Squire. Here are all the products of opium; the alkaloids yielded by the aloe tribe; and *coffeine*, of which the coffee of Martinique yields much the largest percentage; also *thvine*, the *volotile organic acids* and their *ethers*, *essential oils* and their *essences*, etc. The splendid specimens of *paraffin* call to mind a suggestion which the rare sagacity of Liebig made more than ten years before its discovery. "It would certainly be esteemed one of the greatest discoveries of the age," says Liebig, "if any would succeed in condensing coal gas into a white, dry, solid, odourless substance, portable, and capable of being placed on a candle-stick or burned in a lamp." And now we have the solid white paraffin made into candles, whiter and finer than the purest wax, while the liquid products are sold for burning in lamps and for lubricating properties. It is worthy of mention that not a single explosion has ever occurred from Young's paraffin oil, although millions of gallons of it have been consumed in Great Britain. Many dangerous naphthas, however, are sold under this name. Most of the specimens of paraffin in the exhibition, have been obtained from turf or peat, and brown coal, although it may be procured from the various petroleums, bitumens, and coal oils, or bituminous coals. We can hardly over-estimate the importance of this discovery. I suppose that this is the finest collection of chemical products the world has ever seen. But let us return to *aniline* and its beautiful dyes. This substance, first formed by Unverdor-

ben, by acting on indigo with hydrate of potash, is a colorless limpid liquid, of an agreeable vinous odor and burning taste, and takes its name from *anil*, an Indian word, applied to one of the plants from which indigo is obtained; afterwards it was found in coal; and, in 1856, Bechamp discovered a method of forming it from benzole, by mixing it with nitric acid, which converts it into *nitro-benzole*, and then subjecting it to the action of acetate of iron, in the form of acetic acid and iron-filings—the resulting decomposition furnishing aniline in large quantities. As it is a base, it forms crystallizable salts with acids, which are analogous to those formed from the metals. The sulphate is the salt generally used in the manufacture of dyes. I believe it was Dr. Hoffman, who, by pointing out the test for the presence of aniline, led the way to the discovery of the new and splendid aniline series of dyes: although it was Mr. Perkins, son of the American steam-gun Perkins, who discovered *mauve*, or "Perkins's purple," whilst endeavoring to make artificial quinine. I need not point out the chemical processes for obtaining these magnificent new colors, as they may probably be found in recent chemical works. They are known as *mauve, magenta, fuchsine, rosaniline, indisine, asaleine, etc.*, which are only modifications, probably, of the same substance, *aniline*. There are three large splendid crowns of acetate of rosaniline, in large octahedral crystals, possessing a metallic lustre, rivalling in effect the wing cases of the most brilliant Indian beetles.

I pass over the *dyes from lichens and madders, lac-dye, indigo*, the various *pigments and varnishes, etc.*, which, though highly useful in the arts, are not particularly connected with medical science, to notice *Medical and Pharmaceutical Products*. The Pharmaceutical Society of London exhibits a very complete collection of these, including nearly every preparation found in the new edition of the British Pharmacopœia. Here, perhaps, is the finest collection of *Cinchona Barks* ever brought together; each specimen of bark being placed in front of an excellent specimen of the species of cinchona tree from which it has been taken; near by, also, are specimens of the living plant; associated with them is a fine series of quinine and other cinchona alkaloids. The samples of *ether, chloroform*, the *essential oils*, and the *opium alkaloids*, are on a very large scale, while the specimens of *codeine* are, perhaps, the finest ever seen crystallized in large masses. *Cod-liver* and *Dugong oil* figure largely, while there is a large display of the various *syrups;* among the rest, our American preparation of the *compound syrup of phosphate of iron*, absurdly called "chemical food." The *Fluid Extracts* of the most important substances are also exhibited; and as alcohol is considered as a very objectionable adjunct in making these preparations, *glycerine* is subtituted in its place, as well as a solvent for many of the alkaloids and other vegetable principles. It has this advantage, that fluid extracts prepared with it remains unchanged for a long time, and are perfectly miscible with water. The extracts, I believe, contain about 15 per cent. of glycerine. Here also, I saw *pepsine wine, santonin, kamala*, and cigarettes of the *datura tatula*, which is believed by many superior to the common stramonium in alleviating asthmatic complaints.

I should have stated that the *chloroform* exhibited is chiefly from the manufactory of Messrs. Flockhart, Duncan and Co., of Edinburgh, whose establishment I visited in 1849, and was furnished with their formula. They then had acquired a great reputation for the excellence and purity of the article they produced, and this reputation has been fully sustained to the present time. The samples which they now exhibit, are produced from pure alcohol and also methylatic spirit. No one can examine this extensive collection of pharmaceutical products, contributed by many pharmaceutists, not only of London, but also of the country, without being struck with the very great advancement made in this branch of our profession, within the last ten or fifteen years. Not only have many new substances been discovered or isolated from the crude vegetables containing them, but the evidences of more careful, scientific and skilful manipulation are everywhere apparent. This is especially obvious in the preparation of *solid* and *fluid extracts*, as well as *syrups* and *ointments*. Still, there can be no doubt that these latter are far inferior to the same preparations of the Messrs. Tilden of New Lebanon, and other manufacturers in the United States; inasmuch as they are not prepared *in vacuo*, I believe, in a single instance. The vacuum-process has long been adopted in our *own* country as well as France, but scarcely at all in Great Britain; hence, their solid and fluid extracts, though elegantly put up, are quite inferior in efficacy to both American and French. They neither keep as well, nor are they of equal strength. It seems to be supposed by some, that evaporation *in vacuo* can only take place at a temperature of 212° F., which would be sufficient to decompose the active principles of the articles employed. But the Tildens conduct this process at the temperature of 120°. There are some extracts exhibited from which the albumen has been removed; some inspissated at low temperatures in a current of dry air, and some effected in shallow earthen pans at a temperature not exceeding 120°, with constant and active agitation. There are, probably, very few specimens but what would become mouldy on exposure to the air, and few but what would rapidly deteriorate from the same cause. I do not find that much attention has been paid here to the influence of cultivation, different soils, or fertilizers, in modifying the constituent principles of plants. In this respect our countrymen and especially the Messrs. Tilden have taken the lead, although Mr. Lawes of Rothamstead has recently instituted some experiments in the same direction.

But I am in danger of extending my letter to too great a length. I have recently been visiting and obtaining plans, etc., of the best constructed civil and military hospitals in Great Britain, and have been kindly aided by the government official's especially Capt. Galton, one of the commissioners appointed by Parliament in connexion with Lord Herbert and Dr. Sutherland "for improving the sanitary coudition of Barracks and Hospitals." Hereafter, I shall have something to say on these important subjects.

Medical News.

Acting Surgeon-General.—Surgeon J. R. Smith, U.S.A., is now engaged as Acting Surgeon-General, in place of Surgeon-General Hammond, now absent on an official visit to Philadelphia, New York, and places further north.

Surgeon A. K. Smith, formerly of the Army of the Potomac, has been appointed Medical Director of Transportation at Philadelphia.

Brigade-Surgeon Waston, formerly engaged on board the Potomac Hospital boats, has been ordered to Gen. Sturges's command as Brigade-Surgeon.

Dr. Wm. J. Hutchinson has been relieved from duty at the Fall's Church Hospital, and ordered to do duty in his regiment.

Brigade-Surgeon D. P. Smith has taken charge of the convalescent camp at Fairfax Seminary in place of Dr. Armstrong, now doing duty at Fall's Church.

Surgeon B E. Freyer, formerly of Columbia and Mount Pleasant Hospitals, has been ordered to St. Louis.

Four thousand empty beds are now at the disposal of the Medical Director in the hospitals about Washington, including churches.

The Army Hospital at Portsmouth, under charge of Surgeon Sheldon, U.S.A., is transferred to the Navy Yard, and will henceforth be under the charge of Dr. Wood, Surgeon of the Navy.

The Hospital at Point Lookout.—The Government is now building a large and commodious hospital, capable of holding 2,000 sick and wounded soldiers, at Point Lookout, Maryland.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.

SESSION 1860-61.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

LECTURE XI.—PART III.

Liability to Convulsions decreasing with Age.—Various Causes of Convulsions.—Dental Convulsions.

THE equality of a portion of the symptoms in a large number of cerebral diseases is a well known fact. The prevalent liability to one of them, viz. convulsions, is a peculiarity of infantile age. The smallness of the large hemispheres explains the suddenness of the loss of consciousness in very young children, the undeveloped condition of the cerebellum, the loss of power over every one of the voluntary muscular actions; thus convulsions are a very frequent occurrence in very early infancy, and it can be said, that the number of cases decreases with every month. This is positively true, and the often repeated statement of the greater frequency of convulsions during dentition, that is, during and after the second half-year, is a mistake. My own experience, moreover, has not been able to convince me of an assertion I have often heard from good observers, viz. that the period of the second dentition should be more fertile in attacks of convulsions than that immediately preceding. Let us see, however, on which facts this assertion is based, and whether or not dentition, either first or second, is so very influential in producing convulsions, that the diminution of attacks with increasing age should be essentially interfered with. It will be our main object to investigate the principal causes of convulsions in infantile age, the place among these causes which can reasonably be assigned to dentition, and thirdly, the manner in which the protrusion of a tooth can become the cause of an attack of convulsions.

I have spoken of cerebral and meningeal hyperæmia and anæmia as causes of convulsions. Almost every one of the morbid conditions of the brain, and many of the skull, have the same results; for instance, inflammation and its consequences, mollification, pseudoplasms particularly of tubercular nature, exostoses of the cranium, etc. These are very frequent causes of convulsions, and allow of but an unfavorable prognosis. Their majority is not of a primary nature, but the secondary result of diseases in distant organs, as the digestive organs; or of dyscrasic affections, or some functional anomalies; they are very generally followed by effusion, or complicated with cerebral hyperæmia of more or less serous character. Such convulsions afford the aspect of a real cerebral affection, the attacks being either clonic or tonic, and always combined with loss of consciousness. Sometimes they show a singular periodicity; epilepsy is often traced to early infancy. Only in such cases where the spine is gradually participating in the affection of the cerebral substance or its meninges, the convulsions assume a peculiar tetanic character. As a general rule, they are universal; the muscles of the face, thorax, and abdomen, and the extremities, appearing to be principally affected, either contemporaneously or alternatively. Sometimes, however, they are singularly local. Both in children and in adults, the m. rectus internus is frequently convulsed by an affection of the m. abducens; the oculomotory nerve, the motory portion of the fifth, facial, and hypoglossus nerves are frequently the only parts affected; and the local convulsion of the gastrocnemius muscle, depending on a few ramifications of a spinal nerve, is no rare occurrence.

Next to those mentioned hitherto follow the convulsions depending on some change taking place in the blood. Poisons introduced into the system, like opium, nux vomica, and strychnia, lead, mercury, and ergot, produce convulsions belonging to this class. Obstructions in the venous circulation of the brain or the large vessels of the neck have similar effects, while obstruction in the arterial circulation is attended with quite different symptoms. For ligating the carotid arteries, or emboli in one or more arteries of the brain, are very apt to give rise to sudden paralysis. To this class there also belong changes taking place in the milk of the mother or wet-nurse, in consequence of alcoholic beverages or mental emotions. Further, the effect of malaria and the unknown principles active in the eruptive stages of exanthematic fevers; the decomposition of the blood in phlebitis and pyæmia, uræmia, and cholæmia.

Of a somewhat different nature are those convulsions which depend on anomalous functions of, or contents in, the stomach or intestinal canal. Improper food and therefore defective digestion, fermentation, flatulency and colic, and intestinal worms, are almost as frequent in the wealthy as in the poor; therefore convulsions from this cause are often observed, but fortunately in their majority not very dangerous; spontaneous vomiting, or evacuation of the bowels, will very often have set in before the doctor has time to call, and the child appearing to struggle a short while before, as if dying, is lively and busily engaged with his toys. Not quite so frequent as the former are such convulsions as depend on diseases of the respiratory organs. Sometimes a severe attack of bronchitis or pneumonia will set in with convulsions, but generally the last stage in fatal cases will be the most usual time for their appearance; then they are but the symptoms of imminent death. General convulsions during the spasmodic attacks of hooping-cough are not very frequent; they are observed as the results of the spasmodic contraction of the abdominal muscles, diaphragm, and the expiratory muscles generally, which repel the blood into the large veins and produce cerebral congestion, by not allowing the blood to leave the cranium by means of the jugular veins. They are dangerous from two causes; first, from the congested condition of the cranial cavity, and finally from the more or less protracted period necessary to subdue a severe hooping-cough. This danger is a real one, in spite of the improved means of really both shortening the duration, and mitigating the attacks of this disease.

The urinary and sexual organs also influence the nervous system sufficiently to give rise to convulsions. The allusion to uræmic poisoning of the blood, of which I have spoken just now, will suffice to direct your attention to diseases of the kidneys and albuminuria. Testicles retained in the inguinal rings have been known to produce convulsions. Diseases of the bones also have a similar effect, if we are to follow the opinion of such authors as consider rhachitis, and the rhachitical condition of the cranial bones, as a disease of the osseous system. I must say that I do not participate in this opinion; the rhachitical process shows best in the bones, but they are neither the only, nor even always the most important part amongst those affected. And as to craniotabes I do not hesitate to say, that the convulsions occurring during its course are the result of meningeal and cerebral effusions which are very apt to take place cuotemporaneously. Hypertrophy, however, of the cranial bones, and premature ossification of the cranial fontanels and sutures, will sometimes give rise to convulsions.

Finally, I should mention the occurrence of convulsions resulting from influences on the external skin and sensory organs. Refrigeration, by both congestion to the internal parts and irritation of the peripheric nerves, is known to have this effect, sometimes; so is brilliant and sudden light striking the eyes, or unexpected and extraordinary sound hurting the ear.

After all, the origins and seats of convulsions show a great many varieties. While a number of cases depend on the nervous centres, particularly the brain, others depend on some irritation influencing either the course of the nerves or their peripheric ends. Of the highest importance, however, are such as depend on the irritation of sensitive nerves, which at the origin of both the sensitive and motory nerves is communicated to the latter, by them reflected to their peripheric ends, and there active in the muscular contraction. To the class of these reflected spasms, reflex convulsions, belong those of which we have spoken as produced by irritation of the urinary and sexual organs, of the skin, and of the respiratory and dige-tive organs. To this class also belong those cases, which undeniably may be observed sometimes as the result of irritation of the last ramifications of the dental nerves. [This will happen in such cases, in which the protrusion of a tooth is really attended with, and even prevented by, an inflammatory disease of either the jaw or gum.

Original Communications.

DIFFICULT OBSTETRICAL CASES.

By GEORGE T. ELLIOT, Jr., M.D.

PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM, CONSULTING PHYSICIAN TO THE NURSERY AND CHILD'S HOSPITAL.

(*Continued from Feb.* 15th, 1862.)

CASE LXXXVI.—*Brow presentation—Forceps and version failed in consequence of the powerful unyielding contraction of a circular band of uterine muscular fibres; perforator, crotchet, and craniotomy forceps having also failed, the patient was finally delivered with the cephalotribe—Chloroform.*

Mrs. —— fell in labor with her fourth child in the night of the 6th of March, 1862, under the care of Drs. Bishop and Case. She was robust and well built, but the antero-posterior diameter of the brim was somewhat undersized, and her previous labors had been slow on this account, but had terminated successfully both to mother and child without interference. Dr. Case informed me, when he came for me, that Dr. Bishop had failed to deliver either by version or forceps, and being thoroughly acquainted with his great ability in obstetric operations, I took my cephalotribe with the other instruments. By the time of my arrival, March 8th, the waters had been discharged for more than twelve hours. The brow presented, with chin directed to the right sacro-iliac synchondrosis; os fully dilated; child evidently full size. No advance had been made through the brim, nor was there any arrest by any portion of the pelvic brim; on the contrary, flexion could be very readily brought about, and the presentation converted into that of the vertex. When this had been accomplished, the posterior fontanelle was directed to the middle of the left ilium, and my forceps were readily applied by passing the first blade in front of the left sacro-il. syn., and carrying the other directly to its place behind the right acetabulum. But my strongest tractions failed to do more than reproduce the brow presentation. A repetition of the manœuvre had the same effect. In short, the head would turn as it were on a pivot, but not advance in its totality. One blade used powerfully as a vectis accomplish nothing. It was evident that neither Dr. B. nor I could accomplish anything in this way. Proceeding to turn, I then found exactly what Dr. B. had described, viz. that the arrest was due to a circular uterine band, tetanically contracted a little below the shoulders of the child. Thus the knees were above this circular constriction on the right side of the uterus, and I toiled vainly without being able either to bring one down, or to push a leg by pressure from above through the right side of the uterine wall. All efforts at version by external manipulation alone, or conjoined with the hand in the vagina, failed also, when I recommended craniotomy. Before doing so, however, Dr. Bishop again renewed his efforts, and succeeded in bringing the left foot to the brim of the pelvis, from which place we could advance it no further nor push up the head.

It is important to mention that during the operations of Dr. Bishop before my arrival, chloroform had been given, and that during all these efforts Dr. Case kept the patient as profoundly under its influence as possible, without in any way relaxing the tonic spasm of the fibres referred to.

Careful exploration now enabled us to reach a loop of pulseless funis, and thus all objections to craniotomy being removed, I opened the head, and broke up the brain. Both the crotchet and the craniotomy forceps broke away piece after piece of the well ossified head without advance. Under these circumstances, with the full approbation of the gentlemen present, I took the cephalotribe (Scanzoni's) and without any difficulty locked it, and crushed through one diameter. Still my tractions did not avail, and it was thought better that it should be reapplied, in an opposite diameter, which was again readily effected. Having again crushed through the fœtal skull; by the unyielding grasp of this powerful tractor, I withdrew the head and overcame the obstacle. The child was a male and of large size. Leaving the placenta to the management of Dr. Bishop, I was surprised to be called again to the bedside, to notice the curious way in which the constriction described had reproduced itself, or rather, perhaps, had steadily advanced with the altered uterine bulk, and now retained the placenta in an imperfect hour-glass. This, however, did not make the removal of the after-birth (which was not adherent) an operation of difficulty, though it necessitated the introduction of the whole hand. In so doing the brim of the pelvis and lumbar vertebræ were carefully explored.

Without the aid afforded by this powerful yet thoroughly manageable cephalotribe, I do not know how long it would have taken to overcome the singularly strong and tenacious grasp of this tonic uterine spasm.

Mrs. —— recovered perfectly.

CASE LXXXVII.—*Forceps for Cessation of Fœtal Heart Sounds.*

Mrs. K—— engaged me in October, 1859, to attend her in her fourth confinement. Her three children had been still-born at term, and two had presented the breech. On examination I found that the head presented, and the fœtal heart sounds were distinct. Within a fortnight the labor commenced, and proceeded without anything worthy of note—occiput anteriorly, inferior strait reached—until suddenly the fœtal heart sounds, which I had been watching attentively, grew faint and stopped. Without waiting for chloroform, I immediately delivered with forceps, and succeeded in reviving a feeble but well developed child. Unfortunately, however, it died at the age of two months from pneumonia. It is my conviction that many still births might be prevented by more frequent examinations of the fœtal heart than are customarily made during the progress of labor.

CASE LXXXVIII.—*Albuminuria.—Convulsions.—Forceps.—Mother and Child did well.*

Dr. Winter sent for me on the 14th of September, 1861, to a primipara, aged 20, in puerperal convulsions, which had then recurred during five hours. She was unconscious on my arrival, and had been so for two hours. Head presenting in the first position, descent completed. Dr. W. kept up the moderate use of chloroform, and I delivered a living child with forceps. This young mother, like so many others, presented on careful examination, neither puffiness, pallor, nor œdema, nor any expression of the albumen with which her urine was loaded. Mother and child did well.

CASE LXXXIX.—*Powerless Labor.—Delay.—Unexpected change of Fœtal Head.—Forceps.—Both did well.*

Mrs. F——, primipara, was confined September 19, 1861. Duration of labor, twenty-four hours. At the commence-

ment of labor the head presented in the first position, a fact recognised by Dr. Barker and myself. The progress was slow and unsatisfactory, pains ineffectual, and not strengthened by ʒj. of Squibb's fl. ext. of ergot and ʒvj. of Neergaard's saturated tincture. After waiting twenty-four hours, Dr. Thomas was called in consultation, and I requested him to decide the question of interference. He advised the use of forceps, and recognised the posterior fontanelle just behind the right acetabulum, where indeed it was, having passed there during the twelve hours or more which had elapsed since my examination of the position. As she had a systolic, mitral, cardiac murmur, she was brought under the influence of ether by Dr. Thomas, when I delivered her of a living female child with forceps. The parietal bones were remarkably thin and parchment-like, and the sutures quite wide. The placenta was so tightly grasped by irregular uterine contraction, that it had to be removed by the hand. The child had some hæmorrhage from the vulva on the fourth day, after which it did well. Mother recovered perfectly.

Case XC.—*Albuminuria.—Post-partum Convulsions.—Post-partum Hæmorrhage.—Subsequent Death of Mother.*

Dr. —— called me to Mrs. ——, a multipara, who had been attended by a German midwife. She had subsequently suffered from convulsions and hæmorrhage, for which the Dr. had been called, and after insuring good uterine contraction, and giving brandy by enema, he came for me. Her pallid, anæmic look, struck me more forcibly than her unconscious condition, though there were no traces of blood in the bed. On examining the abdomen, however, I found the fundus of the uterus above the umbilicus, and the womb filled with clotted blood, which was readily taken away, when a small portion of retained placenta was found. After the customary measures, position, brandy, ergot, and beef-tea, had rallied the patient's strength, I left. She was still unconscious. There was no other œdema than in the legs. Urine drawn with a catheter, and found to be very albuminous. I am informed that she died a few days afterwards.

(*To be Continued.*)

REPORTS ON
SOME RECENT IMPROVEMENTS IN MATERIA MEDICA AND THERAPEUTICS.

By EDWARD H. JANES, M.D.,

OF NEW YORK.

V.

EFFECTS OF THE PREPARATIONS OF IRON.

Dr. D. S. Gans, of Cincinnati, has translated from *Virchow's Archives*, and published in the *Lancet and Observer*, some observations on the effect of the preparations of iron on the tissue-change, made by Dr. Pakrowsky, of St. Petersburgh, who, after measuring daily in all the patients the temperature of the body, the quantity of the consumed food, the quantity of the excrements, the specific gravity, quantity of chlorides and urea in the urine, etc., concludes that "the temperature of the body is positively heightened by the use of these preparations. This increase results in some cases very soon; in one case it occurred after five hours, in others slower, and in one case after a long interval and after a large dose. The temperature, the morbidly lowered as well as the normal one, is increased, and if it ceases to rise after reaching a certain height, having taken a certain quantity of iron, the temperature will rise more by increase of the dose. Several days after using it, the pulse rises also, although not in all cases. Very soon, and consequent upon the increase of the temperature, the daily amount of urea in the urine increases. The use of iron increases the weight of the body. Every preparation of iron produces the same effect, and a change in the different preparations in the same patient does not alter the result. The diuretic effect of citrate of iron was very distinct in two cases, but was wanting in three under the same conditions. In all cases where iron was used, no constipation of the bowels took place, except a slight one after iodide and lactate of iron. It was borne well, and in large doses, by the digestive apparatus (nine grains pyrophosphate of iron, and fifteen grains ferrum hydr. reductum). Dropsical transudations in the subcutaneous cellular tissue were resorbed by the use of iron, even in patients with insufficiency of the mitral valve, and reappeared after stopping with the remedy. The increase of the heart's impulse, and the dyspnœa in patients with organic cardiac disease, disappeared even in cases in which digitalis had done nothing. After the normal temperature of the body had been raised by the use of iron, it lasted a considerable time after stopping with its use before returning to its normal condition; whilst the morbidly lowered temperature rose quickly by the use of iron, it fell just as quickly by stopping with its use—at least, where the other pathological symptoms continued, and where, consequently, the cause of the low temperature was not cured." From the above conclusions, the author feels justified in ascribing to iron a nutritive power. The increase of temperature indicating a stronger tissue-change is not in consequence of increase in the quantity of the blood or of the blood corpuscles, both of which are slow operations. The same may be said of the increase of pulse which follows rather than precedes the elevated temperature. Rejecting also the respiration as unaltered by the iron, and hence having no influence on the temperature, Dr. Pakrowsky directs us "to look for the effect of iron in the finest arterial and capillary system, one of the important places of nutrition, and the growth of the tissue and organs, and so much more, as the disappearance of dropsical transudations in the subcutaneous cellular tissue after the use of iron points to that system. The most probable is the supposition that the iron acts upon the contractile elements of the finest arterial branches, which must have, without doubt, a high and important influence upon the capillary circulation, and, namely, upon the degree of the tonics, *i.e.* the degree of tension of the walls of these ramifications. The iron must consequently alter the conditions of the diffusion of the elements composing the tissue and organs. Only in this way does it seem possible to explain the quick effect of iron upon the nutrition, and the resorption and the œdematous transudations."

MEDICINAL TINCTURES WITHOUT ALCOHOL.

Sir James Murray has submitted to the Surgical Society of Ireland, a process for extracting the medicinal virtues of various vegetable substances, by using for a menstruum a solution of magnesia and camphor in distilled water, holding carbonic acid in solution, instead of alcohol, the latter, on account of its exciting nature, being often objectionable and sometimes altogether inadmissible, especially in some diseases of children. Experiments had already been made and the results published, sufficient to attract his attention to this subject, especially those made by Dr. Thomas Skeete, in 1786, in which it was found that fine powder of pale bark, acted on by magnesia, produced a solution which when filtered was of a deep brown color, more bitter and astringent than even an infusion of red bark, producing a precipitate with sulphate of iron more intensely black and copious than the common infusion of bark, and possessing also superior medical virtues. Bergman and Braude found that magnesia exercised a solvent power over the most decided resinous bodies. Camphor, being an antiseptic, and rendered soluble by bi-carbonated magnesia, a solution of the two, aided by the preservative properties of carbonic acid, forms a permanent solution, which is now submitted to the profession as a general solvent of medicinal substances. The liquid itself is used with advantage in the place of camphor julep, on account of the greater quantity of camphor it contains. Aloes, buchu, calumba, cardamoms, cinchona, gentian, galls, hops, rhubarb, sarsaparilla, valerian, ginger, are among the plants suited for digestion in the aërated fluid camphor. Any one of these, in pro-

portions of ten ounces of the dried substance, in coarse powder, may be macerated in two quarts of the solvent for some days, agitating them occasionally. It was never the intention of the inventor of these improvements either to supersede the use of proof spirit where admissible, or monopolize their preparation. The intention is to exclude alcohol only from such tinctures as cannot convey enough of the active principles of bulky drugs without dram-drinking dangers. It is claimed that when these drugs are macerated in fluid camphor and magnesia, the carbonic acid, in excess, exalts the power of the remedies and aids their preservation. The Dublin *Medical Press*, April 16, contains a more lengthy account of these preparations.

CANTHARIDES AS A THERAPEUTICAL AGENT.

The internal administration of cantharides in large doses, with the mode of its operation, forms the subject of a paper published in the Cincinnati *Lancet and Observer*, from the pen of Dr. Alex. McBride, Surgeon O. V., U. S. A., who strongly advocates it as "an agent the most powerful to rekindle the waning spark of vitality—an agent which in many cases of disease at an almost helpless stage, will rally the scattered and almost dissipated vital forces, concentrate and generalize their action, and re-establish that series of atomic changes upon which vital action depends." He was led to the investigation of the subject in the year 1854, when typhoid and continued fever prevailed to a considerable extent in northern Ohio, and he frequently saw patients in whom congestion of the lungs had supervened at an advanced stage of the fever. These were treated with the application of emplast. canthar., and in many cases with marked success, and the observation made that in those cases that were at all remediable, the abatement of bad symptoms began within thirty minutes after the application of the plasters, especially when applied over a large surface. An effect so prompt could not be due to vesication, but was supposed to depend either upon the plaster acting as a poultice to the warm part, or the absorption of cantharides. The latter theory seemed more rational to the writer, and he resolved to try the result of cantharides when administered internally, and now reports a number of cases illustrating its happy effects. The first case reported is that of a feeble woman, aged fifty, who had long suffered from an obscure remittent fever, and every few days reduced still lower by a "sinking" chill. During one of these chills sixty minims of tinct. cantharides were administered at once, from which she soon rallied, and from that time her recovery was uninterrupted. Other cases are reported, comprising one of extreme nervous depression, partial palsy, typhoid pneumonia, animal poisoning, gangrenous erysipelas, low stages of typhoid fever, cholera, etc., in all of which rapid improvement is said to have followed the first administration of the remedy. The dose was usually from ʒ ss. to ʒ iss. of the officinal tincture, sometimes alone, sometimes in combination with ammonia, or camphor, or quinine, or iron, as each was indicated, or alternating with the iodide of potassium. In none of the cases did strangury occur, and he says it will not where the peculiar action of the remedy is plainly and clearly indicated, which means that stage of the disease which authors have pointed out as the "blistering stage." He does not disparage blistering, but in urgent cases has applied them in connexion with the internal use of the tincture; but in extreme cases we cannot wait for the absorption of cantharidin through the skin, "when vitality and blood have almost forsaken the surface," the internal administration of large doses becomes necessary to insure a speedy action. As a general indication for its use he gives the following: "*When in atonic, asthenic, or adynamic disease it is a desideratum, from whatever cause, to produce general or local capillary tonicity, the internal use of cantharides will be indicated, and in quantity proportional to the urgency of the demand.*" And again: "When turpentine is indicated to produce general action, cantharides is still more indicated, if the indication is urgent; but they should not both be given." When it is determined to use the cantharides internally, a full dose (one drachm, or perhaps more) should be given at once, after which smaller doses will generally suffice. Its repetition should not be trusted to incompetent hands, but the prescriber himself should as far as possible administer it, remembering that like all potent drugs it is as capable of doing mischief as good, and should only be given to a sufficient extent to accomplish the object desired: for if it acts by re-establishing the series of atomic changes upon which vital action depends, a too free exhibition may urge these changes beyond the point of endurance, the tendency of which would be to destroy. The writer believes cantharides to act primarily upon the capillaries, by inducing tonicity, diminishing their calibre, whereby congestion is relieved and absorption promoted; and that its action upon the general constituents of the organism throws a large amount of nitrogenized effete matter into the circulation, which the kidneys elaborate into urine, which increases the quantity of dense urine; and he has noticed the fact that so long as the urine is dense there is no strangury, but when it grows pale the quantity grows less, and if the medicine is continued strangury will follow. Hence we have the following rule:—"*Cantharides may be given in free dose (in cases where indicated) as long as the urine continues of a darker color than pale amber.*" After some observations on the local and general effects of cantharides as usually administered, he thus concludes:—"Now, in conclusion, I wish to say that I have written the foregoing facts because they are true, and ought to be known to the profession; and for the few conjectures submitted, I ask your indulgence till they are further considered."

The same journal contains a report by Dr. G. R. Patton, on

THE USE OF THE SEEDS OF THE PUMPKIN IN TÆNIA.

A number of cases are reported, all of which had repeatedly undergone the usual routine of treatment. An emulsion was made with two quarts of the hulled seeds and two quarts of water, and a large tumblerful given three times a day, preceded by a light diet and free evacuation of the bowels. The effect was in all the cases to bring away large pieces of the worm, in some of which the head was found. He thinks the pumpkin seed claims our first attention as an exterminator of tænia, the frequent failure being due to discontinuing the remedy too soon. The treatment should be maintained from four to six days, unless the head be discovered, the patient being confined to a light diet. No purgative should be used during its use, as the emulsion itself is sufficiently laxative, if a light diet be enforced.

CASES

TO SERVE IN THE HISTORY OF THE RELATION WHICH EXISTS BETWEEN

PUERPERAL FEVER AND EPIDEMIC ERYSIPELAS.

By M. PIHAN-DUFEILLAY,

INTERNE DES HOPITAUX, MEMBER OF THE SOCIETES D'ANTHROPOLOGIE ANATOMIQUE-MEDICALE D'OBSERVATION.

[Translated from the French of the Union Medicale, by Dr P. F. C. Deslandes, of New York.]

(*Continued from* p. 74.)

Those examples of the communication of erysipelas through the miasma of puerperal fever, could not moreover receive a more striking confirmation than by the demonstration of a reciprocal action of erysipelas on the development of puerperal symptoms. This mutual influence of erysipelas and puerperal fever, the infectious emanations of which could indifferently produce one or both of these morbid conditions, according as the subject attacked would offer the conditions necessary to the development of one or both of these affections, has not, as we said, been yet studied with care, so that facts of this kind must have passed

unnoticed. Hence cases sufficiently numerous and conclusive are wanting to solve this important problem.

However, we will mention a few facts, which although of limited importance in themselves, would be of great value if confirmed by recent well observed facts.

Peu, according to Veson, attributed an epidemic of puerperal fever, which devastated the *maternité* of the Hotel-Dieu, to the position of the wards, where emanations arising from the neighboring surgical wards penetrated. The suppression of this miasmatic current of air, and the change of neighborhood, sufficed to arrest the march of the disease.

In our own times we find facts quite as authentic, and perhaps more convincing. Dr. Hutchinson relates that two physicians, living ten miles from each other, had an appointment to meet at a patient's house, situated half way from the town where each of these gentlemen lived. After the opening of abscesses, the result of phlegmonous erysipelas, and the handling for some time of the affected part, both physicians went back home. Within the thirty hours following, each of them attended a woman in confinement, and, what was remarkable, both women died of puerperal fever, although not a single case of the disease existed in their village nor in the neighboring towns.

Dr. Ingleby relates that a physician was engaged in making incisions on a part affected with a grave phlegmonous erysipelas, when he was sent for in haste to attend a midwifery case. He went and confined the woman, who was attacked with puerperal fever, and soon died. During the ten following days, the same physician attended seven other women, all of whom had puerperal fever. None of his colleagues in the same city met with a case in his practice.

In the month of June, 1848, a carpenter wounded himself in making a coffin. It was in the village of Leuchars. As he was placing the deceased in the coffin, the wounded part came in contact with some liquid oozing from the cadaver. Symptoms analogous to those that attend anatomical punctures followed, lymphangitis, then intense erysipelas, which covered the arm and reached the trunk. Three days after the appearance of the erysipelas, his wife, who lived in his room, and watched him, was seized with enlargement of the ganglions, chills, fever, then extremely intense erysipelas. Meanwhile, the daughter of this carpenter, seventeen years of age, and a servant in a neighboring farm, came to her father to be confined. The day after delivery she felt a chill, became prostrate, and died in forty-eight hours with all the symptoms of typhoid puerperal fever. I was sent for, says Dr. Hill, to attend this family. From there I went to a labor. The unfortunate woman whom I had delivered, died on the fourth day, of typhoid puerperal fever. These were the only cases I heard of in the county at that period.

The following still more conclusive facts are from the same physician:

On the 30th of August, 1849, Dr. Hill was called to see a little girl eight years old, attacked with erysipelas. The swollen ganglions suppurated and broke. Nine days after the appearance of this erysipelas, Madame F——, the mother of the child, was attacked with the same disease. During its course, this lady was delivered of a child, whose face and head were affected with erysipelas. This exanthem made, a few days after, its appearance around the navel, spread, and caused the death of the child. As to the mother she recovered slowly, and, after grave symptoms, referred to erysipelas. I should mention that this exanthem had been almost suddenly arrested in its march by labor, and that it resumed its usual course four days after delivery. The midwife who had on the tenth attended Madame F——, was on the eleventh called to deliver a servant who lived a short distance at her father's. The sixth day after her delivery, this woman was taken with chills, diarrhœa, distension of the abdomen, with pain, fever, vomiting, in a word, all the symptoms which characterize puerperal fever. Her recovery was long and tedious. Her father, an old man, who had nursed her, felt a few days after the appearance of the puerperal fever, the symptoms of erysipelas, with diarrhœa and prostration, and died on the ninth day. The midwife of Madame F——, who had given puerperal fever to her second lying-in woman, was herself attacked on the fourth day with a grave erysipelas, with suppuration of the ganglions, etc. The nurse, who two days after the confinement of Madame F——, replaced the midwife, was obliged to leave, because three days after her entrance into Madame F——'s service, she was seized with intense erysipelas of the face. Lastly, the servant who replaced this nurse, was, on the fourth day of her attendance, obliged to take to her bed, being affected with erysipelas, intense angina, with false membranes, accidents which were soon followed by the most alarming typhoid symptoms.

For analogous cases see an article of Dr. Duncan entitled, *Puerperal Fever and Erysipelas—North American Medico-Chirurgical Review*, November, 1857. The *North American Review*, for 1858, contains cases bearing strongly on this subject, by Dr Levergood. Some articles of Mr. Hinkes Bird, in the *Midland Quarterly Journal*, March, 1857, treat of the same subject.

Tympson, in his obstetric works (1856), Volume II. pp. 31 and 33, says, when the fingers are impregnated with the morbid secretions of erysipelas, the inoculation of these in the sexual parts of the woman produces puerperal fever quite as surely as those coming from a true case of puerperal fever. A few pages further: "Erysipelatous secretions produce puerperal fever just as surely as puerperal fever secretions produce erysipelas."

The greater number of our citations have been borrowed from foreign physicians, both English and American. German reviews contain no cases of this kind; and in France we have but few that are well authenticated. This has led us to believe that the cases with which we had met in our excellent master's *service*, Mr. Hardy, were not unworthy of publication.

To show the value of these cases, and their most prominent points, it suffices to recall the circumstances in which the erysipelas made its appearance. Lying-in women, victims of an epidemic of puerperal fever, left the infected ward and suddenly the disease ceased. Other women, strong and vigorous, whose physiological functions were performed in all their integrity, replaced the women affected with puerperal fever in the ward they had left, and almost immediately an epidemic of erysipelas broke out among them. There is in this double result, more than a simple coincidence, particularly if we consider that our patients attacked with erysipelas presented some insignificant spot of the skin denuded, an almost imperceptible lesion in some of them, and which, however, was sufficient, in two of them, to irritate the lymphatics so that lymphangitis preceded erysipelas. The conditions of our patients were, in every way, so different from those operated upon, and those affected with extensive wounds, that if the erysipelas met with in the latter is called traumatic, that which attacked our patients may well be called spontaneous. However, in both cases, there is a wound if a denudation of two millimetres square may thus be called. Now, this lesion, however small, in injuring the lymphatic network of the skin, was sufficient to determine the seat of the erysipelatous eruption, of which it might be called the occasional, or at least the localizing cause.

(To be Continued.)

The Proposed Hospital on a Chesapeake Island.—Dr. Coolridge, U. S. Army, has just returned from the islands of the Chesapeake, where he was dispatched by the Government to find a convenient location for a hospital. A suitable site has not yet been found.

Absent Surgeons Called to Duty.—The Government is desirous that all surgeons, now absent on furloughs, should immediately report to their regiments, and that all vacancies left by regimental surgeons should be immediately filled by the Governors of the several States.

REMARKS ON SCARLET FEVER.

By A. SEARLE, M.D.,
OF ONONDAGA VALLEY, N. Y.

[Read before the Onondaga County Medical Society, Jan. 27, 1862.]

(*Concluded from page 82.*)

One simple but very efficient application to the neck in the commencement of these troubles, is hops and vinegar, applied in the following manner:—Take a strip of cotton cloth, five or six inches wide, and of sufficient length to reach round the neck and fasten; then place a handful of hops in a row, nearly the whole length of the cloth; then fold the cloth over the hops, and run the edges of the cloth together with the "running stitch;" then in the form of a stock, dip in boiling vinegar, and when sufficiently cool, apply it around the neck, and constantly wear it through the whole course of the disease, excepting to be renewed occasionally, when dry, by dipping in hot vinegar again. This application had been suggested to me by a lady friend who had tried it, and after condescending to examine the nature and effect of this remedy, I have thrown aside every other, and adopted it in every case of scarlet fever, especially where there is any tendency to glandular complication. I will venture the statement, and say I had rather dispense with any and every other application, internal or external, excepting the medicine to be given at the commencement to prepare the system for a course, than to dispense with the application of hops and vinegar to the neck. In the very nature of the disease the tendency is to the worst kind of inflammatory complications in the glands of the throat and neck. Now, as a kind of negative prophylactic, we must avoid every kind of application that will unduly irritate the skin, and prevent the free perspiration and exhalation of morbid matter through the pores, such as mustard cataplasms, ice and cold applications, greasy salt pork, cupping, scarifying, leeching, and blistering. The tendency of the disease is also to mortification of the parts, especially, and hops and vinegar are a suitable antiseptic. It produces the right kind of counter-irritation. It does not abrade the skin, and thus prevents the patient from suffering any undue amount of irritation. It produces a salutary fomentation, and a glow of agreeable heat throughout the whole system; and in fact, produces a general perspiration, equalizing the excitement, reducing the heat, and expelling a great deal of morbid matter from the circulation. In proof of the above good effects of this cataplasm, I can say I have always had the best of effects, that is when I have had the whole control of the case. One case of a child seven or eight years of age was attended with delirium, and was comatose, in which state he was left by his physician as hopeless. I was called in the night, and prescribed the stock of hops and vinegar, saffron tea, etc. The effect was a sudden restoration, without any other treatment of importance. I was in New York city about eight years ago. A gentleman with whom I was acquainted was doing business there. He had just lost two children with the scarlet fever, under the care of Dr. S., a celebrated physician. Another child, the only one he had left, at the time, was then taken with the disease. He inquired of me what they should do. I told him of the hops and vinegar, and the mild treatment. He was going immediately by railroad. On arriving, he informed the family of the hops and vinegar, and inquired of the doctor if it would answer, as though it might be improper or dangerous. The doctor made light of it, as of not much importance, but he consented to its application, and the child recovered, and is still living.

I might say of the pulse as a diagnostic symptom, that it is small and frequent in every case of scarlet fever. That in the fatal cases the patient is comatose, the surface of the body of a dark red color, and the pulse is very feeble and rapid. The food, in all cases of scarlatina, should be light and of easy digestion. The temperature of the sick room should in all cases be uniform and higher than in other fevers. What is generally called secondary fever, erroneously anasarca, is generally produced by exposure to cold.

All the cases of secondary fever or of dropsy, I have seen as a sequela, have appeared under very different circumstances from the original scarlatina. The diathesis had entirely changed from asthenic to sthenic, and, notwithstanding the anasarcous appearance of the body and the general puffiness, the nature of the disease has been highly inflammatory, affecting in general the whole sanguineous system. Sometimes the inflammation would locate on the brain, then spasms and convulsions would supervene. Sometimes the lungs would be the local part affected, and in others the disease would become general. But all the cases that have occurred in my practice have yielded to a very thorough antiphlogistic course of treatment; bleeding repeatedly, especially in some cases of convulsions, thorough cleansing with calomel, blistering, etc. But these cases that occurred several years ago, may be said to appear under very different circumstances now, as we have to be on our guard for the typhoid element which now prevails in most of our fevers. I might as well have omitted the last sentiment, for it does not correspond with my own views of scarlatina and its nature. Some authors, in treating on the nature of scarlatina, admit that it may be combined with typhoid fever or typhus fever, which indefinite admissions serve to confine and lead us away from the true theory, and, of course, a correct and successful practice. Scarlatina, in all its varied effects, is peculiar to itself, and sufficient of itself to sink the system and destroy life in a very short time.

When we have a case of typhoid or typhus fever, we do not expect scarlatina to set in and interrupt the treatment. Neither would it be any the less inconsistent or detrimental to the treatment of scarlatina, to admit that typhoid fever might be classed in combination with scarlatina, or in the diseases of the sequelæ. Typhoid fever, sometimes in its commencement, is attended with some common local sthenic inflammation. But the system suddenly, in some cases, sinks into a low state of debility, when quinine and brandy are freely given, almost in unlimited doses, with the most beneficial effects. In some instances these have been given, even before the inflammatory state had subsided, to haste a kind of change or crisis, by perspiration, and prevent the system from sinking as low as it otherwise might do. But everything is changed in scarlatina. The inflammation and fever are entirely different in their nature, as I believe, in every stage. The secretions and excretions must not be obstructed by brandy and quinine when the action is high; it must not be brought down, scarcely at all in any case by depletion. And thus, by the specific and controlling nature of scarlatina, when the system is low, it cannot be raised by drinks and stimulants, or brandy and quinine. But the system in all its functions should be kept in a normal state as nearly as possible, and waiting for the disease, which will have its course, to terminate in the desquamation of the cuticle, or the loss of the hair of the head, or the nails on the fingers and toes, as sometimes happens. I shall be pardoned for what may appear like egotism in these remarks, nor must I be thought superfluous, for they are made without notes from my own practice many years ago, when physicians and authors had not so well learned the true nature of scarlatina. But authors more modern than Cullen and Thomas, have adopted nearly the proper course. The general plan pursued in the family of five children referred to above, I have ever since adhered to, and generally with the same success.

I know of an instance where a lady was taken with scarlet fever, the contagion of which was caused by the winds for the distance of a mile. I could find no other explanation for the manner in which she caught the disease.

When it is said that the symptoms should indicate the treatment, it is not meant that the remedies should be applied to the symptoms, merely as the so-called specifics are in the homœopathic practice, but symptoms showing the nature of the disease in all its variations in severity,

and different local affections, should determine the treatment. Thus, in a case of delirium, showing a great degree of excitement and determination of blood to the brain, and other symptoms corresponding, it would indicate that blood might be taken. But, as said before, in regard to vomiting, we induce it to relieve the pressure, and not with a view to cure the disease till it could have time to run its course. What is said on blood-letting in scarlatina *per se*, is only meant to apply in some special case in the commencement of the disease; but as a common remedy it must be decidedly contra-indicated, and inconsistent with the nature of the disease.

It is said in the MEDICAL TIMES by gentlemen in the discussions on scarlatina in the New York Academy of Medicine, that a recovery had not been seen after convulsions occurring subsequent to the appearance of the eruption, and that anasarca, following scarlatina, was treated successfully with belladonna and colchicum. I recollect two cases as having occurred in my practice. One was my own son aged 14 years, who had just recovered from a light attack of scarlatina, went out a short distance with men at work on the road, he was soon afterwards taken with violent convulsions and with all the puffiness and anasarcous appearance that generally occurs in the sequelæ. It was overcome by repeated and copious bleedings, calomel, etc. One other similar case occurred the same season in a lad seven or eight years of age, with violent convulsions with the same puffiness, which yielded to the same treatment, and all the anasarcous symptoms in both cases, disappearing with the convulsions. I wish to make a perfect distinction between scarlatina *per se* and the disease following in the sequelæ. In the first disease, the scarlatina, the system is suddenly overcome with a contagious poison. It must and will have its own course, and control the system sometimes entirely. The remedies must of course be designed not to apply directly to cure the disease, but indirectly to palliate at first and modify, and in this way effect a cure.

In the disease of the sequelæ, as the diathesis of the system and the nature of the secondary fever had become entirely changed, the practice should be bold and thorough, the remedies applied to cure directly by relieving the inflammatory state of the blood and its violent action on some of the organs, and in this way overcome the puffiness of the flesh and the solids, which I may suppose is not so much occasioned by any hydropical accumulation as from the *debility* or *lesion* of the *solids*, and the predisposition given to the blood, to *inflammations* by the original scarlatina.

Reports of Hospitals.

NEW YORK HOSPITAL.

AMPUTATIONS OF SHOULDER—AMPUTATIONS OF THIGH AND OF FOREARM—SYME'S OPERATION—DISLOCATION OF THIGH—VARICOCELE TREATED BY LIGATURE—REMOVAL OF FRACTURED END OF TIBIA, ETC., ETC.

[Reported by JOHN T. KENNEDY, M.D., Acting House Surgeon.]

DURING the months of June and July, in the first surgical division, there have been performed by Dr. Parker, the surgeon in attendance, a number of operations which may be summed up as follows: three amputations at the shoulder, two amputations of the thigh, one of the forearm, and one of the foot (Syme's), one perineal section, and two for ligature of the veins in varicocele. Besides these there have been the usual number of amputations of fingers, toes, etc., made by the House Surgeon. A sketch of the different cases, in the order in which they have been alluded to, may be of sufficient interest to the surgeon to repay for their perusal.

I.—*Encephaloid Tumor of Arm—Amputation of Shoulder.*—Magt. Fay, æt. 23, was admitted June 7, 1862. About six or seven years ago a tumor, about as large as a hen's egg, first made its appearance on the outer aspect of the right arm near its middle. It was hard, painful, tender, and immovable. The growth of the disease was very slow until about a year ago, when it had acquired the size of an orange. A surgeon, who had charge of the case, attempted the removal of the disease by an operation, but found it impracticable. The wound healed in good time and without trouble. About six months ago some caustic application was made to the tumor, since which time an abraded surface existed, giving rise to frequent bleedings. For a year previous to admission, it had been the seat of a dull heavy pain, which was worse at night. At the time she presented herself for treatment at the hospital, the diseased mass extended from just above the elbow to the junction of the middle and upper thirds of the arm, and measured superficially twenty-two inches, involving the whole circumference of the limb. It was hard and lobulated to the feel; the supernatant skin was shiny and adherent; the cutaneous veins tortuous and dilated, and the external aspect was the seat of a fungous ulcer about three inches in diameter, which discharged a thin light-colored and fœtid pus. The general health of the patient was good. According to her own account her father died of a tumor similar in character, and situated on the face.

A consultation was held five days after admission, and it was decided to remove the limb at the shoulder-joint, which operation was performed by the oval method. The patient rallied well from the operation and the wound healed.

II.—*Gunshot Wound of Shoulder—Amputation at Shoulder-Joint.*—Michl. Fagan, æt. 50, was admitted May 29, under the care of Dr. Halsted, with a wound of the shoulder which was inflicted at the battle of Williamsburg twenty-four days previous to admission. The ball entered a little external to the tip of the acromion of the right side, grazed the outer aspect of the os brachii, and made its exit at the posterior wall of the axilla, about three inches below its point of entrance. On examination the track of the missile was found open, and was discharging a thin dark-colored and fœtid pus. There was very extensive burrowing of matter, and roughened bone was seen through the wound and was felt quite extensively with the probe. The general condition of the patient was very poor, and he was suffering from diarrhœa. This latter symptom was soon checked by opiates and astringents, but the life of the patient seemed to be otherwise in great peril. On the 12th of June a consultation was held, when it was thought best to remove the arm at the shoulder-joint, as the only means left to save life. The oval method was adopted. The hæmorrhage was almost nothing; ligatures were promptly applied, and all oozing from the cut surfaces was arrested by the application of the liquor ferri persulphatis. The arterial blood looked very dark, as did also the tissues through which the incision was made. When the operation was completed it was not deemed prudent to remove the patient immediately from the operating table, so feeble did he seem. Stimulants were freely administered, the lower extremities were elevated, and warmth applied to the surface, but the patient soon began to sink, and died in about an hour and a half after the operation. No autopsy was made.

III.—*Gunshot Wound of Shoulder—Amputation at Shoulder-Joint.*—John C. Myers, æt. 21, native of Pennsylvania, private in 61st Pennsylvania Volunteers, was admitted June 15, 1862. He stated that fifteen days previously he had been wounded in the right shoulder by a musket ball in the battle of Seven Pines. The head of the os brachii was shattered, and was excised by the regimental surgeon on the succeeding day by an incision extending from just below the top of the acromion to midway between that process and the elbow. The patient is of the opinion, however, that the ball was not removed. On admission the wound had nearly healed. On the 16th, about 7 P.M., there

occurred arterial hæmorrhage from the stump, which was controlled by pressure on the subclavian artery, and by the application of lint soaked in liq. ferri persulph. The amount of blood lost was about eight ounces. Patient stated that during his journey hither from the seat of war, a profuse hæmorrhage occurred while he was at stool but it was soon controlled by pressure and other simple means. The occurrence of the hæmorrhage in that situation was looked upon as ominous of evil, and a consultation was accordingly summoned, the day following, to determine what was best to be done. The patient was then, by common consent, etherized, and the wound explored, pressure being kept up on the subclavian artery. A quantity of coagulated blood was turned out, but no bleeding point was discovered. The head of the scapula, in this examination, was found to be so badly shattered, that it was thought best to remove the limb at the shoulder-joint. This operation was accordingly done by the simple division of the soft parts on the inner side of the arm, the upper portion of the os brachii being everted. The cavity of the wound was stuffed with dry lint, and the patient put to bed in a comfortable condition. Subsequently the edges of the wound were approximated by adhesive plaster, and union by second intention courted. Every thing progressed well, and the patient made a good recovery.

(To be Continued.)

Reports of Societies.

MEDICAL AND SURGICAL SOCIETY.

DR. T. M. HALSTED IN THE CHAIR.

MEDICAL AND SURGICAL CASES.

STATED MEETING, June 1, 1861.

(Continued from page 79.)

VERSION AS A SUBSTITUTE FOR CRANIOTOMY.

DR. THOMAS made some remarks on the operation of turning, as a substitute for craniotomy and the long forceps, in cases of obstructed labor from narrow pelvis. Five months ago he was called during labor to a woman who had had five dead children. He found a contracted pelvis and a prolapsed funis. He returned the funis without difficulty, and determined to perform version. The child was living. The body was delivered, but the head became wedged, and before it could be delivered the child died. In a second case of contracted pelvis Dr. Thomas applied the long forceps, and failed to engage the head in the pelvis. While the child was yet living he turned, and the head became wedged as before, and during the consequent delay the child died—the mother afterwards died of puerperal fever. In a third case, where the woman had previously lost five children, never having had a living child, Dr. Thomas turned and delivered successfully. Dr. Thomas suggested fracture of the arm as a useful expedient when the head is arrested, this operation allowing the head to pass without difficulty. In the successful case above mentioned the arm was broken. Dr. Thomas further maintains that where the head is arrested, as it so often is in cases of version, it becomes necessary from the interference with the placental circulation to establish respiration. For this purpose a tube was suggested to be inserted into the mouth. It is provided with two lateral rings for the fingers, for convenience of introduction, and the mouthpiece is so arranged as not to be obstructed by the tongue of the child. Dr. Thomas has used this in the successful case, where the attending physician is confident that the child breathed through it before the head was delivered.

DR. ELLIOT confirmed the experience of Dr. Thomas in the operation of version in contracted pelvis, and prefers the application of long forceps above the brim. He has no fear of seriously wounding the tissue of cervix, either by the application or traction of forceps. The fracture of the arm he believes to be a useful expedient, and further suggests firm abdominal pressure as an aid in delivery of head.

In all Dr. Thomas's cases forceps were applied, and in the second case Dr. T. is confident that injury was done to the cervix, and the woman had puerperal fever in consequence.

DR. ELLIOT believes the cervix is generally lacerated in ordinary labor, and that it may be divided without harm.

The Society adjourned by limitation.

STATED MEETING, Oct. 5, 1861.

DR. BUMSTEAD related a case of sudden death from erysipelas, following exsections of a cancerous breast. The wound was doing well and a portion of it had healed by first intention, when erysipelas supervened and extended rapidly, causing death on the tenth day after the operation. Post-mortem examination revealed pleuritic effusion on both sides, eight ounces on one, and sixteen ounces on the other, with a granular condition of the kidneys, urine not examined before death.

DR. VAN BUREN related a case of injury of elbow-joint, in a child, where there had been fracture of os brachii just above the joint and splitting of the condyles. The most remarkable feature in the case was the paralysis of the radial branch of the musculo-spiral nerve. The power of extension of the arm upon the hand was gone. There was considerable deformity.

DR. VAN BUREN also alluded to a case of concussion of the spinal cord, that had recently fallen under his observation, in a lieutenant of volunteers, who was captured at Bull Run, and roughly dragged and trampled upon on the battle-field. He was left on the field with severe concussion of the brain and spinal cord, was afterwards taken to Washington and confined to his bed six weeks. There was now no apparent lesion, but he suffered from considerable pain and nervousness in the lower extremities, and in the morning had to be assisted out of bed. He walks with difficulty after he first rises, but in the evening gets pretty good use of his limbs.

DRAINAGE TUBE OF CHASSAIGNAC.

DR. BUCK made some remarks on the use of the drainage tube suggested by Chassaignac, for the treatment of abscess. In one case recently treated at the hospital the result had been very favorable—the patient, a healthy male, æt. twenty-five, had a large abscess developed, without any apparent cause, on the buttock, supposed to contain two or three pints of pus. It was traversed with a drainage tube in its dependent portion. The swelling diminished gradually, and at the end of ten days the tube was removed, the discharge being then very slight and the walls of the abscess collapsed. Another case of abscess, of the cold variety, was treated in the ordinary way in the hospital, about the same time, and presents a contrast to the one just described. The case was one of abscess in the lumbar region, unconnected with the kidney or spine; it was punctured and allowed to discharge gradually, three or four ounces daily, for three days. The walls then inflamed and became sloughy; it was freely opened and the patient did well for a few days, when an acute abscess appeared on the buttock, near the trochanter, and the patient rapidly sank and died.

(To be Continued.)

THE SICKNESS IN THE SIXTIETH NEW YORK.—The sanitary condition of the 60th New York Regiment, from St. Lawrence county, still continues very low, and mortality is on the increase. The regiment is stationed at Washington, Va. Dr. Vollum writes to the Surgeon-General that typhus and typhoid fever are the diseases which have prostrated and thinned out this regiment, and urges that nothing will check their fearful inroads except a speedy removal of the regiment to a more northern clime. The medical officers have laid the matter before Gen. Pope, who will order the regiment to Washington immediately.

American Medical Times.

SATURDAY, AUGUST 16, 1862.

SANITARY INSPECTION IN THE ARMY.

One of the most important clauses of the Act reorganizing the Medical Department of the Army, was that creating a bureau of sanitary inspection, with a corps of inspectors. Every European government which has perfected its military organization within the last few years, has given especial attention to the systematic enforcement of hospital and camp hygiene. Medical officers have been detailed with ample powers to secure the observance of the most stringent sanitary rules. The good effects which have followed such wise legislation, are strikingly illustrated in the history of the English army. An eminent writer states that, under the new system, an exact account is kept of the diseases of every soldier from the day he enters to the day he leaves the army or dies on the pension list; and the returns are so arranged as to exhibit the diseases of every regiment separately, as well as the amount of disability, invaliding, and death produced by each malady, and as far as possible by each conspicuous cause. The variable sanitary state of the army is thus brought clearly before the eyes of the Medical Department, the commanding officers, the Commander-in-Chief, and the Secretary of State, so that evils, instantly known, can often be suppressed as they arise. The force at home, he alleges, consists of men in the prime of life, between the ages of 20 and 40, generally unmarried, and living hitherto in barracks. He believed that, "whereas 17 in 1000 of these men at home had died annually, a body so selected, well fed, well lodged, and well handled, morally and physically—admitting only recruits satisfactory to the examining medical officer, and parting constantly with its invalids—should not experience a higher rate of mortality than that expressed by 7 in 1000; the rate of mortality actually experienced by the population at the corresponding ages in the healthy districts of England. The result was nearly achieved in the corps at home in 1859. The mortality of the Foot Guards had been 20 per 1000 (1837–46), and fell to 9; that of the infantry of the line had been 18, and fell to 8; which was also the mortality of the cavalry, the engineers, and the artillery. The annual deaths among all arms of the service at home had been 17·5; the deaths at Shorncliffe and Aldershott in the three years 1857–58–59 were at the rate of 5 in 1000. The previous excess was referable to zymotic diseases, such as fevers, cholera, diarrhœa, and to consumption; the effects of crowding in barracks, of bad ventilation, bad water, bad drainage, badly chosen sites, bad cooking arrangements, and the absence of the means of cleanliness. A great result has been realized; in England hundreds of lives have been saved; indeed, a battalion living in arms at the end of the year 1859 would, at the previous rates, have then lain buried in their graves. Severe sickness has also decreased, and the vigor of the whole body of healthier men has, no doubt, increased in proportion."

We may gather a more correct idea of the character of the sanitary inspection instituted by the English government, from the instructions given to the Sanitary Officer dispatched with the Expeditionary Army to China. He was directed to accompany the officer appointed to select hospitals or quarters for troops, whether temporary or permanent, and examine into the sanitary condition of the buildings, their drainage, ventilation, water supply, and every point likely to affect the health of troops or welfare of the sick, and point out to the Quartermaster-General every defect requiring removal or remedy. When troops were landed to occupy towns he was to make a careful survey of the same, and prepare a plan for organizing a proper sanitary police to preserve cleanliness, remove nuisances, and for the execution of all measures necessary for the health of the troops. When a site for an encampment was about to be selected, he was to proceed with the Quartermaster-General to examine the locality, and advise as to its salubrity; when the grounds were selected he was to make such recommendations as he deemed necessary as to their proper preparation, the arrangement of tents, the number of men to occupy each, the maintenance of cleanliness, the supply of water, the position of latrines and slaughtering houses, the removal of refuse, the interment of the dead, drainage, etc. He was to keep himself constantly informed of the general condition of any occupied town, camp, or hospital, as to ventilation, cleanliness, surface drainage, and all local matters affecting the health of the force. He was to make a daily inspection of the whole camp or occupied portion of the town, giving early attention to the appearance of any disease likely to become prevalent, and examine as to the source of the same, whether it proceed from sanitary defects in cleansing, draining, nuisance, over crowding, bad ventilation, unwholesome water, dampness of site, marshy ground, or other local cause, as bad or deficient food, intemperance, unwholesome liquors, unripe fruit, defective clothing, want of proper shelter, fatigue, exposure to the vicissitudes of weather. When the army advanced, he was to collect information as to the medical topography of the district, with reference to selecting camping grounds. If the troops passed through a malarious district he was to indicate to the commanding officer the means of preventing attacks of disease on the march, and he was advised to have the troops served with some refreshment, as coffee, before marching, as also quinine wine, as a daily ration, during the months when fever and bowel complaints prevail. In operations by river the troops were to be served with tea or coffee before disembarking, and refreshments were to be given immediately on their return. In river expeditions he was to visit daily each vessel conveying troops, and inquire into their sanitary condition, the cleanliness, ventilation, use of deodorants and disinfectants, etc., and to require the daily inspection of the men in order to detect the earliest appearance of scurvy or zymotic diseases, especially cholera. He was to inquire into and examine regularly the nature of the supplies and provisions for the troops, whether the food was sufficiently varied in its constituents and amount, whether properly cooked, and to report all defects. The clothing was also in his charge, and was to be adapted to the variations of the climate; to guard against chills, he must prevent, as far as possible, the soldiers from sitting in huts and tents with the outer clothes off, or heedlessly open. To prevent scurvy, he must order the issue of rations of lime-juice and sugar three or four times a week.

Such was, in brief, the character of the sanitary inspection of the British army while serving in China. And what was the result? Those who have faith in the health-giving efficacy of the simple laws of hygiene, rigidly enforced, will be prepared to learn that the army in China passed through a most toilsome campaign, exposed to every hardship and variation of climate, and yet maintained a better degree of health than the average of the people of England in civil life. Had such thorough and systematic sanitary inspection been carried out in the Army of the Potomac, there can be no doubt that it would have triumphantly accomplished its purpose, and fulfilled the glorious prophecies of its friends. Well did LORD PALMERSTON remark, in alluding to the remarkable healthiness of the British army since sanitary inspection was instituted, "that nothing was more important than the preservation of the health of the army. Putting it on the lowest grounds, there was nothing so uneconomical and prodigal as carelessness on this point. But in reality it stood on higher ground, because if men were enlisted for the service of the country, the government was bound to take due care of their lives. No money could be better laid out than in guarding the health of the soldier from the influences to which it was subjected."

The war of the rebellion found the medical department of our army unequal to the exigencies. Under the pernicious system of promotion according to seniority, and no retirement of officers on account of age, the principal offices had become filled with men past the period allotted to human life. Its Chief was an octogenarian, and had long before sunk into dotage. The sudden enlargement of the army put the department to the severest test to attend to its simplest wants. Under these circumstances, sanitary inspection of camps, hospitals, etc., was not attempted, even if it was contemplated. This great, and as we have shown, all important work, was undertaken by the Sanitary Commission, for whose good offices the country cannot be too grateful. It is to this body that we are indebted for those reforms in the medical department which have placed at its head, and will hereafter secure in that position, an officer whose only claim is—QUALIFICATIONS.

And it is to the same body that we are indebted for the creation of the department of sanitary inspection, the importance of which to the strength and effectiveness of the army we have already demonstrated.

In the organization of this department, great pains were taken to render it free from all political influences, to place in the responsible positions thoroughly qualified men, and in general, to give it the highest possible character and efficiency. It provides a Medical Inspector-General, with the rank of a Colonel of Cavalry, and eight Medical Inspectors, each with the rank of a Lieutenant-Colonel of Cavalry. It directs that "the Medical Inspector General shall have, under the direction of the surgeon-general, the supervision of all that relates to the sanitary condition of the army, whether in transports, quarters, or camps, and of the hygiene, police, discipline, and efficiency of field and general hospitals, under such regulations as may hereafter be established." The eight Medical Inspectors are "charged with the duty of inspecting the sanitary condition of transports, quarters, and camps, of field and general hospitals, and shall report to the Medical Inspector General, under such regulations as may be hereafter established, all circumstances relating to the sanitary condition and wants of troops and hospitals, and to the skill, efficiency, and good conduct of the officers and attendants connected with the medical department."

It will be seen that the scope of duties assigned to the Sanitary Inspectors is equally as great, under proper regulations, as that of the English, and that they have equal power to enforce their recommendations. We have alluded to the beneficent results which followed the thorough sanitary inspection of the British army, preserving it from an unusual mortality under the most unfavorable circumstances, and we cannot avoid the conclusion that equal, if not better fruits, would follow the enforcement of the same system in our armies.

The friends of the measure have waited with great patience, and watched with much solicitude, the organization of this branch of the medical service, and it is not to be denied that they have finally been doomed to disappointment. Carefully as the Act was worded to provide against the baneful influence of political partisanship, or favoritism, in the appointment of the corps of inspectors, not only was the spirit, but even the letter of the law violated, to accomplish such unworthy purposes. In the first place, the Act expressly directs that the "Medical Inspector General, and Medical Inspectors, shall *immediately* after the passage of this Act be appointed by the President." The Secretary of War, upon whom the responsibility rested of securing the prompt appointment of qualified men, in consultation with the Sanitary Commission promised immediate action, and yet the appointments were not made in two months after the passage of the Act. During this time there was the utmost need of the services of sanitary inspectors in every branch of the army. In the second place, the Act provides that these appointments shall be made "by selection from the medical corps of the army, or from surgeons in the volunteer service, without regard to their rank when so selected, but with *sole regard to qualifications.*" In apparent anxiety to secure the best qualified men in the service for these positions, the Secretary requested and received from the Sanitary Commission, a list of names of the most competent medical officers in the regular and volunteer army, from which to select candidates. It will scarcely be deemed credible by those unfamiliar with the all-controlling power of political partisanship at the Capitol, that but very few of the names on that list were selected, while for the majority of the offices different Senators were invited to nominate candidates. Thus the majority of the Medical Inspectors were selected in utter and most shameful violation of the statute. But there was still hope that the Medical Inspector-General, upon whom devolved the most important duties of the department, would be selected with "sole regard to qualifications." The appointment was long delayed, though it should have been immediate, and there was a prevailing opinion in the profession that the selection would fall upon one of the most eminent and experienced members in the army. But what was the disappointment when a name was announced not familiar in medical circles!

Thus has been jeopardied the most important reform which this war has effected in any department of Government; a measure that was destined to save our army from that hopeless disintegration which preventable sickness causes, and give it physical effectiveness on the field.

We make these remarks in no spirit of unfriendliness

towards those gentlemen who now compose the Corps of Sanitary Inspectors. For all, we entertain the highest respect, and for several a warm personal friendship. But we may assure them that much is expected from their labors, and we trust that the future history of the Department of Medical Inspection will abundantly prove that, notwithstanding the improper and censurable method of selection, each individual was thoroughly qualified for his duties. Our only purpose is to protest against allowing such important nomiuations to be weighed only in the political scales. Had the law been sacredly regarded we should long since have had that thorough sanitary inspection of every branch of the army which would have saved it from deciuation during the summer months.

THE WEEK.

The Universal Society of Ophthalmology was formed in Paris in 1861, and is to hold its aunual meetings iu one of the eleven principal cities of Europe. The meeting for this year is to be held at Paris, on the 29th of September. The local committee have extended an invitation to the Medical profession of the United States through the following circular from Drs. Mott and Homberger:

To the Medical Profession of the United States—The object of the Universal Society of Ophthalmology is known to you, and we hope its foundation will mark the present year in the annals of Medical Science. We are fully satisfied that the Society will take, from its first meeting, the position which it has a right to ask among scientific bodies. We believe it is now the proper moment to solicit your help and sympathy.

We invite you to associate yourself with the Society, which will meet for the first time from the 30th of September to the 3d of October, 1862, in Paris.

Your desire to be enrolled on its list of membership is requested to be made known to one of the undersigned, who will forward it to the Central Committee.

The Committee of the City of New York:

Valentine Mott, M.D., 1 Gramercy Park.
Julius Homberger, M.D., 24 West 12th Street.

New York. *May 20th*, 1862.

We learn that Prof. Hamilton, now Medical Director of the 4th Corps of the Army of the Potomac, is preparing a history of the War of the Rebellion, so far as it has passed under his personal observation. A work of this character from the pen of one whose opportunities for observation have been so great, and who is capable of embodying so much valuable information, will be looked for with interest.

In another column will be found a well merited compliment to Dr. John M. Cuyler, U.S.A., late Medical Director at Fort Monroe, but now one of the Medical Inspectors of the Army. Every one who has been brought within the circle of his acquaintance, will heartily respond to the sentiments expressed in the letter of the Volunteer Surgeons from New York. Dr. Cuyler deserves well of Government. As a citizen of a Southern State, at the commencement of the rebellion, every effort was made by promised rewards of high official position to gain his allegiance to the so-called Confederate Government. But he never swerved for a moment from his loyalty to the Government which he had so long and faithfully served, and as a consequence was deprived by the confiscation of his estates, of all his wealth, and compelled to rely again upon his individual energies for support. During the occupation of the Peninsula by the Army of the Potomac, his labors were excessive. To provide for the vast number of the sick and wounded was a task which few could accomplish so well. He has now entered a new field of service in the West, and the good fruits of his experience in all that relates to camp and hospital hygiene will appear in his path. We can only wish for him health and happiness.

We learn that for the new regulation providing two assistant-surgeons for each regiment the country is indebted to Gov. Tod, of Ohio, and Dr. Gustav C. E. Weber, Surgeon-General of the same State. It is an important change, which is destined to add much to the efficiency of the Medical Staff. Gov. Tod makes the following appeal to the profession in his proclamation:—

"To the medical profession, I must also make a special appeal. You have already won renown for your profession, by your prompt and gallant services in caring for our sick and wounded. Your good work, however, must be continued. Our gallant soldiers richly deserve the best medical talent of the State; and it is ardently hoped that Surgeons of the very first rank will continue to tender their services. To be eligible for regular positions in the army, it is indispensable, by order of the War Department, that recipients of commissions be examined and approved by the State Board of Examiners. By this it is not intended, however, that members of the regular profession, of long practice and high standing, shall submit to a school-boy examination. I desire only to know that they are worthy to be intrusted with the high responsibility of ministering to the gallant volunteers who may need their services."

It is stated that Government has taken possession of all the transports, and so far relieve the Sanitary Commission of a portion of its arduous duties. This is, we believe, in accordance with the wish of the Commission, and is the result of the expansion of the Medical Department.

Reviews.

Pain and Anæsthetics: An Essay, Introductory to A Series of Surgical and Medical Monographs. By Valentine Mott, M.D. Prepared by request of the Sanitary Commission. Washington, 1862—pp. 16.

The Sanitary Commission have done a noble work in supplying to the Surgeons of the Army readable monographs on many of the more important questions in medicine and surgery. The Pamphlet before us is the introduction to the series. It is well that the first of these papers is on Anæsthetics, and that its author is Dr. Mott. If experience can settle any question in practical surgery, certainly the author of this monograph may speak with authority. Every American surgeon will peruse its pages with interest and profit.

Dr. Mott advances the following propositions:—1. To prevent pain is humane; 2. Pain is useless to the pained; 3. Pain is positively injurious to the pained. Passing from the discussion of these propositions, the author considers the various narcotics used to assuage pain, and finally the use of anæsthetics. It will interest the profession to learn that the author prefers chloroform to ether. The rules which he gives for the exhibition of anæsthetics are excellent, and cannot be too carefully heeded. He concludes as follows:

"For such reasons then as have been recounted, I desire to direct the attention of the Surgeons of the Army and Navy to the advantages which would accrue from a more extended use of anæsthetics in naval and military practice. I am satisfied

that if, in their operations, the pain were more generally prevented, many lives would be saved which are now lost from the shock to the nervous system, and that, in all severe cases, the prospect of recovery is better, and the subsequent inflammation is milder, when an anæsthetic has been used.

"To this conclusion I have not come hastily. Of so much import have I always regarded the prevention of the pain of operations, and so desirable, if it could be practically effected, that ten years before the introduction of anæsthetic vapor I listened patiently and attentively to the claims of animal magnetism to this power to produce insensibility; but found, and I may say with unalloyed regret, that when fairly brought to the test, its most ardent freuds were compelled to admit its utter inefficiency, and even since the invention of anæsthetic inhalation, I have carefully tested the power of other agents, such as nitrous oxyde, to produce insensibility to pain, but still consider none of them deserving of mention when compared with chloroform or ether.

"In conclusion, perhaps I may say, that these observations and reflections have been made during the intervals taken from a business still pressing, at a time of life when most men desire repose. They are given to the cause of American nationality, and may claim to be at least an old surgeon's offering on the altar of his country. The flag of our Union, the glorious Stars and Stripes, has repeatedly protected me in foreign lands beneath its broad folds, and if what I have written here shall be in any measure successful in preventing the sufferings and prolonging the lives of that noble army who are now serving under my country's banner, I shall receive my reward."

Correspondence.

FOREIGN CORRESPONDENCE.

LETTER VIII.

THE INTERNATIONAL EXHIBITION.

By PROF. CHARLES A. LEE.

(*Continued.*)

London, July 10, 1862.

My last letter was occupied with matters connected with the Great Exhibition. The present will be devoted to the same objects.

The immense display of surgical instruments from almost every country on the globe, except our own, including even Japan, cannot but attract the notice of medical men. My notice of them, however, must necessarily be very general and brief; but you will find excellent descriptions, with illustrations of all the most important instruments here exhibited, by Dr. Fearn, in the "London Medical Times and Gazette" to which I would invite your attention. Most of the instruments and appliances intended for the cure and relief of disease, are collected and arranged in one department, and form a class especially devoted to the purpose, and of course are readily examined and compared. There are about 130 cases of surgical instruments exhibited of all sorts, about one-fourth of them dental; and there is no end to the plasters, stretchers, artificial limbs and eyes, respirators, breast-pumps, magnetic apparatus, electro-chemical baths, stethoscopes, sphygmometers, ozonometers, philosophical and chemical apparatus, &c. A slight general survey will satisfy the observer that human ingenuity has been taxed to the utmost, and has actually supplied all the mechanical apparatus and instruments which can possibly be devised for the cure or alleviation of human ailments, and that nothing more remains for human invention to discover in this department hereafter. No man of philanthropic feelings, can view these immense collections without a sentiment of pride and gratitude, that so much science, skill, and ingenuity have been so successfully exerted in devising means for the relief of human suffering.

The improvements in the mechanical department of surgical science have been immense during the last quarter of a century, and even during the last ten years; and as much has been done to simplify instruments and render them more practically useful, as in the invention of new ones. It is, however, very evident that many surgical instrument-makers lose sight of that important maxim, that simplicity, not complicity, is the object to be aimed at in their construction. The French, as it seems to me, have been especially regardless of this principle; while the English have always kept it more in view. It would perhaps be invidious to make a comparison between the French and British exhibitors, but I am free to say that the relative progress of the two nations, in this regard, during the last ten years, appears to me to be in favor of the English. The instruments of the latter have undergone a most marked improvement in regard to lightness, skilful adaptation to the end designed, elegance of finish, and ingenuity of construction. The recent improvements in orthopœdic surgery are especially worthy of note, especially the appliances intended to counteract the paralysis of certain sets of muscles, as of the foot, forearm, and hand. I am tempted to pass over that unscientific, unphilosophical, and horridly cruel instrument, the *écraseur* and its various modifications, invented by Savigny nearly one hundred years ago, and long since fallen into disuse. It is to be regretted that, in this humane age, any surgeon of any country can be found, who will give any countenance to such a barbarous instrument, or that any manufacturer dare exhibit it among the legitimate appliances of scientific surgery.

The recent increased attention given to diseases of females has stimulated inventors to furnish a great variety of instruments intended for the relief of this class of diseases, such as pessaries, uterine sounds, hysterotomes, instruments for the treatment of uterine polypi, vesico-vaginal fistula, *intra* and *extra*-uterine and vaginal specula, &c.

Nor have diseases of the male genital organs received less attention, as shown by the great variety of catheters sounds, dilators, scarifiers, lithotrites, urethrotomes, and even urethroscopes; by which we are able to see the interior surface of the human bladder, just as we can see the vocal cords and internal surface of the larynx, by means of the laryngoscope. Moreover, we are glad to see saws of lighter construction and more teeth; bone forceps of different curves and capable of more extended applications; new and improved trephines; and very ingenious appliances, intended to relieve congenital and other deficiencies of the hard and soft palate. In regard to chloroform inhalers, unfortunately rarely used in the United States, I must acknowledge myself wholly converted to the expediency of employing them whenever this powerful agent is administered. It is true I have administered it a great many times on a napkin without any fatal accident, but I shudder when I think of some of my cases, where resuscitation was effected with difficulty. I have seen much of chloroform inhalation since I have been in London, and no approach to danger where an inhaler was used; but in two cases where it was administered on a napkin, both the pulse and respiration were suspended for a considerable period. There are patent inhalers of Weiss, Snow, Clover, and other manufacturers, which regulate with the utmost exactness both the percentage of atmospheric air, and chloroform, which the patient inhales, so that there is not the slightest danger whatever of any accident from administering too large a quantity, if ordinary care be used. Four per cent. of chloroform is as large a proportion as it is safe to give. This exact quantity can always be secured by a properly constructed inhaler.

The cases of M. Charrière, the celebrated French instrument maker, will well repay an attentive examination. For originality and ingenuity of contrivance, I believe this manufacturer stands unrivalled. His urethrotomes, dilators, and lithotomes have a world-wide celebrity, and his specula of two, three and four valves, are as yet unsurpassed. I do not learn that his uteroscope has been of much practical service as yet, although favorably noticed, I believe, by the French Academy of Medicine; his modified tracheotomy tube is far superior to the one in ordinary use; and his new obstetric forceps, the blades of which can be

elongated, have some important advantages over those of the ordinary kind.

But it is impossible amidst such a lavish display to go into detail in regard to particular instruments; a few national characteristics, it may, perhaps, be well to notice. The French, it seems to me, excel in novelty, smoothness of finish, and temper of the steel; they have also a greater variety; while the English makers study practical utility more, and adaptation to objects in view. There is a profusion of gold and ivory about some of the English cases in the form of gilded blades and ivory handles, which are not in good taste, but rather meretricious ornaments, which, if they do not positively detract from, certainly add nothing to the value of the instruments. I regret that none of our American instrument-makers have entered the lists in this department, as I am satisfied, their ingenuity, skill, and workmanship, would not suffer by comparison with any of the competitors whose samples are now on exhibition here. In artificial limbs, for example, we can, unquestionably, bear away the palm from all competitors. We may not be able to show so great a variety as the French, as we study simplicity and practical utility more; but we can at least point to as successful results from our great operations, and those of a more delicate, though not dangerous kind, as those of the eye, for instance, as the French, English, or any other nation. It is doubtful whether mere mechanics can, at all, appreciate the possibilities of the simplest instruments in the hands of a skilful and scientific surgeon. Science and mechanics tend to opposite extremes and draw in opposite directions. The first aims to do away with all mechanical appliances whatever, or at least as far as practicable, and rely on the simplest means; the other resolves all skill and all success into some ingenious contrivance, which is almost automatic. This is well illustrated in the operation for lithotomy. A good anatomist will ask for no ingenious lithotomes, etc., to reach the bladder; but prefers a simple scalpel to all the contrivances of a Charrière, a Lue, or a Weiss, and so in other cases. Look also at the strange and bungling contrivances for compressing arteries in cases of wounds, amputation, or the treatment of aneurism, known as tourniquets! How inferior most of them to the thumb of an assistant!

I had intended to speak of a trocar invented by Mr. Spencer Wells for the evacuation of the contents of an ovarian cyst, consisting of a steel tube sliding inside a canula of silver or other metal. I have seen this gentleman use it in a case of ovariotomy, but the fluid was too thick and gelatinous to flow through it; where the contents are quite fluid, I have no doubt it would answer a useful purpose.

Army Medical Intelligence.

DR. JOHN M. CUYLER, U.S.A., MEDICAL DIRECTOR, FORTRESS MONROE.

STATE OF NEW YORK,
SURGEON-GENERAL'S OFFICE,
ALBANY, July 21, 1862.

SIR:—In transmitting through you to the honorable Secretary of War the inclosed communication, I perform the most agreeable duty which has thus far devolved upon me. You who are so thoroughly conversant with the qualities of mind and heart which characterize Dr. Cuyler, will see in this but a merited compliment to a true and noble man. You will find among the signatures the best names of New York, and it would be difficult to find on this side of the Atlantic, or on the other either, a jury of medical men whose verdict is entitled to more weight. To the above expression I beg to add, from personal observation, my cordial affirmation. I have the honor to remain

Your obt. servt.,
S. OAKLEY VANDERPOEL,
Surgeon-General N. Y.

Brig.-General WILLIAM A. HAMMOND, Surgeon-General U. S. Army.

NEW YORK, July 15, 1862.

Hon. E. M. Stanton, Secretary of War:

The undersigned corps of Volunteer Surgeons of the State of New York trust that their addressing you may not be considered an act of supererogation; for, although fully aware that it is not distinctly within the limits of their prescribed duties, they feel that they are discharging a moral obligation in putting on record in the department their high appreciation of the distinguished services which Dr. Cuyler, the Medical Director of Fort Monroe, rendered daily and hourly, with untiring energy, to the multitude of sick and wounded in the department.

From our personal observation we feel pleasure in saying that we have rarely met with so happy a combination of thorough administrative talent with the highest order of personal skill and experience, and that genuine and true gentleness of heart—by the one benefiting those under his care to the full limit of professional skill, and by the latter shedding comfort and gladness, even where the sufferer is beyond reach of the first.

In thus briefly stating the result of our personal observation, we beg to say that we are not prompted to do so by the contemplated change in the Medical Staff of the army; for while, on the one hand, we do not intend to intrude, we feel, on the other hand, confident that government would not overlook the valuable services of so faithful a servant. We beg simply to be permitted, as we said before, to put on record our appreciation of so high an order of merit, and in doing so we trust it is unnecessary to state that our thus addressing you, sir, is not only unsolicited by but entirely unknown to Dr. Cuyler.

ALFRED C. POST, M.D., STEPHEN SMITH, M.D., ERNEST KRACKOWIZER, M.D., GEORGE COCHRANE, M.D., DANIEL AYRES, M.D., DANIEL E. KISSAM, M.D., C. OLCOTT, M.D., JAMES R. WOOD, M.D., WILLIAM DETMOLD, M.D., GURDON BUCK, M.D., WILLARD PARKER, M.D., T. M. MARKOE, M.D., CHARLES D. SMITH, M.D., J. J. CRANE, M.D., JOHN O. STONE, M.D., GEORGE A. PETERS, M.D.

ASST.-SURGEON B. HOWARD, U.S.A., late Medical Purveyor Army of the Ohio, has been ordered to report for duty to Major-General McClellan, the Medical Purveying Department of the Army of the Ohio having been transferred from Louisville to Cincinnati.

Medical News.

HEALTH ASSURANCE—DUTY OF PHYSICIANS.—Not only is it poetically true that

"All men think all men mortal but themselves,"

but it is equally the fact that the only inquisitiveness expressed by the survivors, in nine cases out of ten, is as to the pecuniary state in which their deceased acquaintances leave their wives and families. By the loss of that once familiar face from their boards are the widow and children who remain to be plunged into poverty as well as into sorrow, or are they to have control over riches they have never known before? Perhaps neither, but left with just such scanty allowance of this world's goods as may permit them, with some struggling, to maintain a position but little different from that in which they have hitherto moved. If it have happened that during the time a man has been able to work and receive profit, he has been able, after paying the expenses of his present maintenance, to provide for that terrible contingency, loss of life or health, by hoarding up a store for future necessities, he may be said to have "provided for his family," and satisfactorily to have responded to the inquisitiveness of his friends. But if he have not; if he and his household have lived "from hand to mouth," he will have given another opportunity for us to hear the well known expression, "Ah! we thought how it would be; he has left his family quite des-

titute!" And how few men are really able to lay by anything from their daily wages or annual income! Or it often happens that such as could do so, would not, and those who would, could not. Or, again, that the little hoard which can be scraped together is but a widow's mite after all. Is there any way of guarding against the terrible calamity of a man, who has been living in competency, dying and leaving his family beggars? He has been hard-working, honest, and has held a respectable position, but it was impossible to *save*. He might, perhaps, have put by from five to twenty pounds a year, but what would that have been? Now the only way in which the too frequent and unfortunate result alluded to can be guarded against or provided for, is through *life insurance*. If a man cannot annually withdraw from his profits for investment such a sum as may insure a future subsistence for his family, he must pay an annual premium to a life office, which will secure to his estate a certain sum when he shall die. From what we have said, it is evident that it is in this way the majority of men must seek a future provision for their dependants—a provision which of course will differ in value according to the sum which can be annually spared to place in so profitable an investment. If a man be wise, however, he will seek to diminish the sum in question only by beginning to insure his life as early in his career as possible.—*Lancet.*

Death of Dr. Sanborn.—The Middlesex North Dist. Med. Society.—The following preamble and resolutions were unanimously adopted at a late meeting of the Society:—

Whereas, It has pleased God, in his infinite wisdom, to remove from the scene of his earthly labors, our friend and brother, Eben K. Sanborn, M.D., late of Rutland, Vt., formerly Surgeon of the 1st Volunteer Regiment of that State, but more recently, by the appointment of Governor Andrew, Surgeon of the 31st Volunteer Regiment of Massachusetts;

And, *Whereas*, he left a wide and extending practice to engage in the service of his country, in this dark hour of that country's need, it becomes eminently fitting and proper, that here, where his earlier years were passed, and his professional life, so full of promise and hope, commenced, some public recognition should be made by us, his surviving brethren, of his talents, his ripe attainments, and his moral worth;

Therefore, *Resolved*, 1st, That in the death of Dr. Sanborn, the medical profession has lost one of its young, but most promising members; one who pursued his chosen department of labor, with a zeal, au avidity, and an intelligence, that could not fail to elevate him to an enviable position among the distinguished surgeons of our times. That the country has been deprived, in one of the most important branches of her service, of one eminently fitted by his tastes and his surgical acquirements for the high position he was called to fill.

Resolved, 2d, That Dr. Sanborn has left to his compeers a bright example of what may be accomplished by patient study and investigation, and untiring ardor in the pursuit of knowledge.

Resolved, 3d, That we deeply sympathize with the bereaved family of the deceased in this most afflictive Providence.

Resolved, 4th, That this preamble and these resolutions be entered on the records of the Middlesex North District Medical Society, and that a copy of the same be forwarded to the Boston Medical and Surgical Journal for publication.

Medical College of Ohio.—This institution held an extra summer session, running through March, April, May, and June, and at the close of the term admitted the following gentlemen to the degree of Doctor in Medicine: D. D. Bramble, J. H. Clarkson, J. S. Ely, N. S. Hill, Robert Johnson, H. B. Lung, J. A. Lair, H. P. Kay, J. O. Marsh, C. D. Palmer, James A. Robinson, A. J. Ross, G. W. Sayers, George E. Smith, Charles O. Wright, W. O. Walker, H. C. Waterman, J. L. Wylie, J. H. Wallace. We understand the class in attendance during the session was respectable in numbers. The valedictory to the graduates was by Prof. Blackman.—*Lancet & Observer.*

U. S. Army Hospitals in Philadelphia.—The following is a list of the military hospitals in Philadelphia, with their location, and the name of the surgeon in charge; Broad Street, Dr. John Neill, corner Broad and Cherry Streets; Buttonwood Street, Dr. A. C. Bournonville, corner Fifth and Buttonwood Streets; Christian Street, Dr. J. Reese, Christian Street above Tenth; Episcopal, Dr. R. P. Thomas, Kensiugton; House of Industry, Dr. Picot, Catharine Street, near Eighth; Master Street, Dr. P. B. Goddard, Sixth and Master Streets; Mechanics' Hall, Dr. G. C. Harlan; Fourth and George Streets; Pennsylvania, Dr. C. C. Lee, Eighth and Pine Streets; South Street, Dr. Jos. Hopkinson, Twenty-fourth and South Streets; St. Joseph's, Dr. W. H. Smith, Seventeenth and Girard Avenue; Summit House, Dr. Winthrop Sargent, West Philadelphia; Wood Street, Dr. C. W. Horner, Twenty-second and Wood Streets; West Philadelphia, Dr. J. J. Hayes, West Philadelphia.

In addition to the above, the following hospitals are being fitted up, and will be soon ready for occupancy: The German Hospital on Turner's Lane, calculated to hold 400 patients; the State Arsenal, at Filbert and Sixteenth Streets, which will hold 300 beds; the Hestonville Railroad Depot, West Philadelphia, with 120 beds; the Town Hall at Germantown, with 200 beds: and the Seminary Building of Mr. Crozier, at Chester, capable of holding 800 patients.—*Med. News.*

The annual meeting of the Schoharie Co. Medical Society, N. Y., met pursuant to call, at Schoharie C. H., on Tuesday, May 20, 1862. Dr. William Lamont, President, called the meeting to order. The following named individuals were received as members of this Society, viz. Charles Dickinson, M.D., Seward Valley; C. W. Havens, M.D., Summit; and N. Fanning, Jr., M.D., of Gilboa. The Society then listened to the address of the President. Subject: *Diphtheria.* A vote of thanks was given the President for his very able address, and a copy solicited for publication, which was granted, and Drs. John Pindar, Wm. Lamont, and G. M. Teeple, were appointed a committee for publication. Officers for the ensuing year: President, V. Danforth, M.D., Middleburgh. Vice-President, S. M. Van Alstyne, M.D., Richmondville. Secretary, John I. Swart, M.D., Schoharie C. H. Treasurer, John Pindar, M.D., Schoharie C. H. Censors, P. S. Swart, M.D., John Roland, M.D., S. B. Wells, M.D., P. P. Werner, M.D., C. C. Van Dyck, M.D. Delegate to State Medical Society, John Pindar, M.D. A report of cases in medical practice from several members, together with a general exchange of views of the cause, results, and treatment of *Diphtheria*, produced a most happy and harmonizing result. The Society adjourned to meet on Tuesday, during the term of the Circuit Court, in May, 1863.

We are glad to notice the return of Dr. Swinburne, of Albany, N.Y., from Richmond. Dr. S. was a volunteer surgeon, and at the time of the retreat of the army to James river, was in charge of the hospital at Savage's Station. He nobly remained with the wounded, and only returned home when they were released. What rank shall be given to Dr. Swinburne as an acknowledgment of his heroism? Only that of a volunteer surgeon.

Dr. Armsby, late United States Consul at Naples, returned with his family by the Arabia. He resumes his profession in Albany, and continues his connexion with the College and Hospital.

George V. Winslow, of Massachusetts, and James Kinnier, of New York, have been appointed naval Acting Assistant Surgeons, and ordered to report to Captain Wilkes.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.
SESSION 1860-61.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

LECTURE XII.—PART I.

General Classification of Convulsions.—Dental Paralysis.—Name and Synonymes.—Views of Dr. von Heine.—Symptoms and Consequences.—Etiology.—Dr. von Heine's Reasons for its being a Spinal Affection.

THE remarks made in my last lecture on the various causes of convulsions, and the influence of some irritation of the dental nerves in bringing them on, enable us to classify their etiology in the following manner. Convulsions result from

I. Direct irritation either
  1. in the peripheric course of motory nerves, or
  2. in their origin in the central organ.
II. Irritation of sensitive nerves, the grey substance of the nervous centres being the joining link between the sensitive and the motory nerves,
  1. consciousness being entirely excluded—reflex—convulsions proper.
  2. consciousness being more or less excluded; the brain is the proximate seat.
III. Anomalous nutrition of the nervous tissue
  1. in the peripheric nerves,
  2. in the brain,
  3. in the spine.

In this latter class the morbid symptoms are either permanent, or temporarily induced by either
  1. direct irritation, or
  2. irritation of and through the sensitive nerves, or
  3. voluntary action.

In this classification we cannot include the sometimes permanent contraction of the muscles which does not at all depend on any morbid condition, or irritation, of the nervous system or a single nerve; nor those which, it is true, are brought on by either direct or reflected irritation, or by voluntary action, but at all events require a morbid condition of the muscular substance.

Although the above classification is thoroughly physiological and rational, you perceive at once the difficulty of bringing every case of convulsions occurring in practice, under its proper head. It is entirely impossible to know enough of the history of the patient and of the immediately preceding irritations in every given case, to determine its character. But this much is easily understood, from what I have said, that the large majority of cases of convulsions are of but a symptomatic character, and further, that the proximate causes may be very various and numerous. Therefore it follows, that the practice of explaining attacks of convulsions occurring during dentition, that is, a period of life where a large number of unwonted influences are brought to bear upon the unresisting infantile organism, by nothing but the irritation of the dental ramifications of the fifth pair of cerebral nerves—is entirely one-sided and unjustified. It is true, however, that the distinction between the various possible causes requires more pathological knowledge and diagnostic ability than mere dictatorial airs and the common practice of wantonly cutting down into the gums of a child affected with some unexplained ailment. Always be aware that convulsions are no disease, but the symptom of some morbid alteration or irritation, and that these alterations and irritations are very numerous and various, and that of those very numerous and various irritations, the protrusion of a tooth under more or less unfavorable circumstances, may be one.

Now, after you have reviewed the principal points of the etiology of convulsions, and found out with me the possible connexion of dentition and convulsions, it remains to speak of the connexion of the same process with paralysis, as occurring in young children. Most, but by far not all, of the cases of paralysis in infantile age are observed at the period of dentition, that is, about or after the middle of the first year. Inasmuch as the age in which this affection was principally observed, struck the minds of observers most, it was called *infantile* paralysis; because its etiology and nature were not understood, it was baptized *essential*, as we are pleased to name everything the nature of which we do not know, essential or specific; and as it was generally observed at the time of dentition, and thought to depend on some difficulties in the protrusion of teeth, it was called *dental*. Thus the terms, essential, infantile, dental paralysis, so common in both practice and medical literature, are synonymes.

Infantile paralysis, although not a common, is not an unfrequent disease, and an important one both for its practical bearings and its scientific interest. I shall try to explain, as far as possible, its etiology and nature; but before that I shall have to review the principal views held by the leading authors on our subject. Among the first ranks Dr. von Heine, with his book on *Spinal Infantile Paralysis*, who, in the attempt to provide an anatomical foundation for the peculiar symptoms of the disease, takes all the genuine cases of infantile paralysis for spinal affections. But the description of the characteristics of the disease, as found in his work, fully coincides with the teachings of other authors, and with what observations every one of you will have to make in his own future practice.

Essential, dental, or infantile paralysis, runs its course in two distinct stages, the first of which is very short, so short indeed sometimes that it is not at all or hardly noticed. An infant exhibits some slight symptoms of fever in the evening, is put to bed, sleeps more or less, sometimes quite well, and is paralysed when taken up. Sometimes, however, the initiatory symptoms are more serious, high fever, congestion, cerebral irritation, symptoms of meningitis, or of "difficult dentition" being present. Patient is restless, screams in paroxysms, the eyes are half open in the interrupted sleep. Vomiting, diarrhœa, or the symptoms of rheumatic fever are sometimes observed. Or the first symptoms of an eruptive fever, with or without convulsions, or an attack of convulsions depending on one or more of the above mentioned causes, isolated or repeated, will be observed. The child becomes tired, quiet, and is paralysed. Generally the lower extremities are affected, sometimes an upper one at the same time; frequently a single lower extremity, without an affection of the arms; in some cases paralysis is so local as to affect single muscles only. The urinary bladder and rectum are sometimes debilitated, but never paralysed for a longer period. The whole number of paralytic cases recorded by Dr. Heine amounts to 192. Of these, 158 were such as he comprehends under the head of spinal infantile paralysis. Of these were—

	Males.	Females.	Total.
Paraplegia	17	20	37
Hemiplegia	18	16	34
Partial paralysis	44	40	84

Paralysis of one arm was observed in two cases; it was never cured, and was never complicated with paralysis of any other organ. Paralytic lordosis was observed in a single case.

The second stage, that is, fully developed paralysis, is as long as the former is short. Vital turgor is diminished, skin and muscles are flabby. The sensitive nerves are not at all or but little affected; where there is in the beginning paralysis of the trunk and arm it disappears, with the ex-

ception of a weakness of the muscles of the back sufficient to give rise to paralytic scoliosis. Where the two lower extremities are affected, one will gradually recover its mobility, and sometimes nothing will remain of the original disease but the paralysis of some muscles, principally the peronæi. There is, however, seldom a thorough improvement after the first four, or eight weeks: then the temperature sinks, feet and muscles become atrophic, the bones decrease in both length and thickness. The muscles will shorten, the tendo Achillis being the first to contract; in consequence of repeated attempts at locomotion, deformities will at last show themselves. Lateral curvatures of the vertebral column are very frequent: a bluish tint of the skin, frostbites, and ulcerations are the results of the diminished efforts of the heart and arteries. Bowels operate slowly and insufficiently in many cases; menstruation is not interfered with, and in a single case was even observed at the early age of twelve years. Neither mind nor senses are affected. The renal secretion is more or less normal; some have found a superabundance of phosphate of lime at the time of the commencing atrophy of the muscles, but not all the authors have obtained the same result. The diseases peculiar to early age do not prove particularly dangerous, so that some patients have been known to reach an advanced age. Hutin records the case of a man who died at forty-nine years.

A year or two after the appearance of paralysis, deformities begin to develop themselves, particularly in the lower extremities. Their principal forms are the paralytic varieties of talipes varus, valgus, equinus, calcaneus, contractions of the hip and knee-joint, retrocurved, inverted, and everted knee. They depend on the want of equality as far as the degree of muscular paralysis is concerned; the completely paralysed muscles having lost their power, while their antagonists are still active to a certain degree. Thus talipes equinus is the result of contraction of the tendo Achillis which is not counteracted by an antagonist; the same affection combined with paralysis of the peronæi muscles produces talipes varus; paralysis of the anterior and posterior tibial muscles: talipes valgus; paralysis of tendo Achillis: talipes calcaneus. In a similar manner, in hemiplegia and paraplegia, where the extensors of the legs are paralysed, contraction of the knee is brought on; and adduction of the thigh to the pelvis is the result of paralysis of the extensors of the thigh. Of the mentioned deformities t. equinus comes usually first, t. varus next, t. valgus third, and lastly t. calcaneus. The differential diagnosis between this affection from cerebral and spasmodic hemiplegia is simple and easy; for in this latter muscular retraction sets in with the acute cerebral affection. Paralysis of the arm generally gives no rise to contraction and deformity, as mostly both flexors and extensors are equally affected, and no antagonistic muscular action is called forwards by any disturbance of the equilibrium.

The etiology of infantile paralysis appears simple enough, if we are to believe the assertions of Dr. Von Heine. The nervous centres undergo a rapid physiological development during the first years of life; in this period infantile paralysis is principally observed. Therefore there is a great liability to alterations of the brain and spine, in grave cases of difficult dentition, or severe exanthematic fevers, in consequence of hyperæmia, congestion, and irritation. The usual results of these processes are cerebral and spinal meningitis, with serous or bloody transudations, followed by pressure and paralysis. The age of such children is a very predisposing element, as about this period of life those pathological changes are of common occurrence; a further predisposition is attributed by the author to the very healthy, robust, and vigorous constitution of those generally affected, also to the presence of general symptoms of fever (also in other diseases), high temperature, congestion, convulsions, fright, screaming, and vertebral pain in such children as are sufficiently advanced to explain their sensations. Thus the author sees the cause of infantile paralysis in spinal effusions, in some perhaps in extravasations. The former supposition he considers as founded on the fact, that (by resorption, he says) a complete paralysis of the trunk and extremities will very generally disappear, to a certain extent, during the first period of the whole process. As to the results obtained by post-mortem examinations, they are very few indeed; for as infantile paralysis has in itself no tendency to terminate fatally, there are very few examinations on record. At all events, however, there are a few, which by their pathological remnants proved the spinal origin of the cases. As for other results found in the dead, they give no clue to the anatomical cause of the affection. Such, for instance, is the atrophy of the limbs, especially the muscles, and the degeneration of the latter into adipose, and in one instance even cellular tissue. Nerves and arteries require, it is true, a longer time, and have less tendency to become atrophied and degenerate, but they have been found to be so.

According to Dr. Heine, we need not wonder at the frequency of spinal diseases of local character. It is sufficiently explained by its normal hyperæmia, and its functional character. Lesions of the entire spine, however, are very rare; but Prof. Schiff has proved by experiments, that the affection of a limited part of the medullary substance of the spine may result in complete paralysis. Generally a lesion of the right side will be followed by paralysis on the right side, and *vice versâ*. The action of the sensitive nerves may remain normal, a circular pain only being felt in cases of mere compression of the spine, depending on dilatation of the blood-vessels, and effusion, or certain other diseases of the membranes. This circular pain even may be absent when the anterior lateral parts of the spine are affected. In cases of very superficial and partial affections of the spine, paralysis will be partial in a corresponding degree.

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from page 46.*)

The other case has occurred more recently, and has not been reported. It was in a gentleman, sixty years of age, who had for six years been struggling with diabetes. He had been to a considerable extent his own physician, though when he thought he needed advice he applied to Dr. Cheesman. I saw him with Dr. T. M. Cheesman. A considerable portion of the six years he had made himself quite comfortable by observing the rules laid down by Camplin. About three or four weeks before his death, he was seized with slight rheumatic symptoms, and then a severe pain in the direction of the right sciatic nerve. The urine had fallen to a low specific gravity, had lost its diabetic characteristics, which, however, soon returned, and being examined for albumen, did not contain any, but did contain casts in abundance. Occasionally a specimen was found in which there was albumen, but the quantity was always small. The sugar soon returned, and continued, so that the urine was often both saccharine and albuminous. He died sinking away into a sort of semi-lethargy, easy, and without pain. I cite these two cases because I do not know of any similar ones that have been recorded. Dr. Smith stated to me that some were referred to by Camplin, but I have been unable to find them. At all events the cases are interesting, and were new to me. There is now under observation a gentleman from one of the western cities suffering from diabetes, in whose urine I discovered casts a month ago. His physician has been made acquainted with the fact, and if the case terminates as these have done, we shall have the advantage of noticing earlier the character of the disease, and marking its pro-

gress better; and if the termination is a favorable one, we may learn that the presence of casts is not always indicative of bad consequences.

In this connexion I may observe, that in one instance at least, diuresis or diabetes insipidus has been converted into Bright's disease. A patient, who was very well known in Bellevue, having been there five years ago, and the object of considerable attention on accouut of the large quantities of insipid urine that he passed, was at my last term of service at St. Luke's Hospital, a patient there. He has now albuminous urine, œdema, in a word, all the signs of confirmed and incurable Bright's disease.

Two of the most interestiug relations of the affection under consideration are those noticed in scarlet fever and in pregnancy. During the whole course of scarlet fever after it is fully formed, I am led to suppose, from a limited observation, that the urine can be found to be albuminous in all the grave cases. I suspect it will be found to contain albumen after the second or third day of the eruption, and though I have not continued my observation in such manner as to speak with confideuce in regard to its duration, it certainly in many cases is found again in about a fortnight from the termination of the eruption, and its appearance is marked by very well-kuown symptoms. Now, we have a train of symptoms and lesions which have not usually received the name of Bright's disease, still the changes that take place in the kidney are the same as those which occur in the large white kiduey. In post-mortem examinations the kidney has been either large, or has been distinguished by the appearances that mark the white kidney. Casts are almost always found in this albuminous urine, and they are of the coarse variety, frequently loaded with large granules and the nuclei of kiduey cells, and not unfrequently a considerable number contain blood. Such casts are found very frequently from the large kidney. The symptoms during life and the observations after death ally this affection so closely to the coarse forms of Bright's disease that we are compelled to recognise the relations and seek for a common cause. It is then not wrong to call it acute Bright's disease, although Bright did not include it in his classification. I said a little time ago that the consideration of this form of disease is to my own mind one of the most gratifying, because it is in the great majority of instances cured. In other words here is a form of kidney disease, advancing to great disorganization, produced by a specific poison, aided in many instances by the effects of cold air upon the surface of the body. The causes are at length removed by the co-opcratiou of nature and art. The disorganized kidney then slowly returns to its normal condition, resumes its natural function, and health is restored. And while we can cure a disease which we cannot distinguish from Bright's disease except perhaps by its severity, I cannot but hope that the time will come when we can cure the chronic affection. Nearly the same remark may be made of the albuminuria of pregnancy, however produced, whether by the sympathetic relations between the nerves of the uterus and those of the kidneys, or by pressure of the gravid uterus upon the aorta below the emulgent arteries, by some influence which obstructs the return of blood from the kidney, or by some peculiar state of the blood, as in scarlet fever. No matter what may be the cause, the fact is sufficiently well established, that in a certain proportion of pregnancies, beginning sometimes at a pretty early period, the urine does become albuminous, the whole body is more or less œdematous, casts are found in the urine, and it is also well known that after parturition this same affection continues sometimes for one, two, three months, and then the patient gets well. So far as my observation goes, there are but few instances of this kidney of scarlet fever, and this of pregnancy, which take the chronic form of disease. I can refer to a few pregnant women who have become chronically affected, and who finally died, but they are very few. The great majority get well. Here, again, the cause onceremoved, the patient recovers.

There is still another relation of Bright's disease that is of very grave importance—it is its connexion with chronic disease of the heart. Here I suppose we are likely to lose everything that can be strictly denominated nervous influences, aud I suppose if we seek an explanation we must look for it in the circulatory system—still I am not sure that this is a settled fact. The co-existence of Bright's disease and heart disease has been long recognised; the question that has remained debatable is, which is the cause of the other? I believe it is the more common opinion that the kidney affection produces that of the heart. This is not my conviction. On the contrary, it seems to me that I can cite a hundred instances in which the heart disease was recognised long before any symptom of kidney affection appeared. In most of these cases kidney affection has been looked for, and for a variable time not found, and no very grave symptoms were recognised until these organs had become involved. I do confidently believe, whatever may be the exceptional facts, that, as a rule, the heart is first diseased, and in some unexplained way induces the kidney complication. You may remember, Sir, a patient we saw together, and whom I had seen many months before with heart disease. I stated to him that he had heart disease, and that he would be able to attend to his business, if no disease of the kidney should show itself. There was no symptom of such disorder then, and the urine was perfectly healthy. You will remember how deeply affected with Bright's disease he afterwards became, and how soon he died. I have in my mind a great many instances of this sort where I have said to patients with heart disease years before their death—take care of yourself, live prudently, avoid alcoholic drinks and exposure to cold (as if I had said, don't get congestion of the kidneys), and nobody knows how long you may be comfortable; but let these organs become involved, and you can count the time you have to live in months, perhaps in weeks.

(To be Continued.)

THE OPHTHALMOSCOPE IN MILITARY MEDICAL INSPECTION.

By HENRY D. NOYES, M.D.

The medical man who inspects recruits for the army, finds need of no little tact and skill to detect diseases concealed, or feigned, by those who desire either to obtain a bounty or to escape a draft. Many men have already found their way into the ranks of our army, whose imperfect eyesight unfitted them for duty, and in the coming conscription some may basely seek exemption by pretending to be thus disqualified. I propose to show how complete are the means of diagnosis and detection now at command in this important part of military medical inspection, viz. as to the actual condition of the recruit's eyesight. I do not allude to external diseases of the eye, but to the defects which lie concealed behind the iris, or are pretended to exist.

It is also needless to speak of dilatation of the pupil by the clandestine use of mydriatica: in doing this, the unsuspecting person little thinks that he is only preparing the way for the more complete discovery of his fraud, by laying open more extensively to the search of the ophthalmoscope the essential parts of the organ of vision.

It is not difficult to decide upon the degree of vision of the willing recruit. He must satisfy certain tests:—be able to see print of a certain size at a standard distance. It is not his capacity of reading fine print which should be tested, but his vision of distant objects—as reading a sign across the street, and discerning objects visible to those who are known to have good vision.

One point under this head merits notice, viz.—Should strabismus be a necessary disqualification? I readily assert that it should not—contrary to the rule usually laid down. It should lead to a more critical examination of the vision, but the actual state of the vision, and not the squint, should

be the ground of the decision. Each eye must be examined separately, and if each can see to a distance clearly, the squint ought not to exclude the recruit. It often happens that in strabismus one eye is imperfect, and therefore squints. If this is the left eye, the soldier can take aim with his musket; if it be the right he seldom can, and may, therefore, be rejected. To rigidly exclude from the ranks all who have squint, would deprive ourselves of some valuable soldiers.

I had the satisfaction last summer of adding a soldier to a New York regiment, who had been discarded by the inspector on account of a very conspicuous divergent squint. The young man came to the Eye Infirmary for operation, determined to enter the ranks if the defect could be removed. I found he had perfect vision in each eye. By two operations upon each external rectus muscle, I completely cured the blemish. He could read ordinary print with both eyes simultaneously. He afterwards presented himself for a final visit, dressed in Zouave uniform and about to start for camp.

The case calling for exact discrimination by the medical man is when, on account of alleged obscure vision, a soldier seeks discharge or a conscript exemption. If the disability be genuine, justice to the service and to the person requires his exclusion; if it be feigned, his baseness demands exposure. The entire absence of external signs of ocular disease is of no account in deciding upon its presence. We are not, however, compelled to rely only upon the person's assertions: a careful use of the ophthalmoscope, by one who has had sufficient practice, will settle the question. A case in point is as follows: A man living on Long Island, aged 27 years, came to me desiring a certificate of disability for military service, on account of nyctalopia. This, he said, he had had for many years, and a sister had the same disease. At night his vision was so bad as to make it dangerous for him to go out. In dim light he could see objects only by looking directly at them, his lateral vision being extremely bad. To external appearance the eyes appeared normal, the media clear, the pupil active, iris natural, etc.

On viewing by the ophthalmoscope the interior of the eye, the eccentric parts of the retina were seen stippled with pigment in a kind of network or tracery; dots and lines, spider webs and bird tracks scattered about, and especially noticeable along and upon the twigs of the retinal vessels. The central portion of the retina was free from such deposit. This is the disease known as Retinitis pigmentosa, of which Donders, Müller, Graefe, Wedl, and others, have written. It is incurable. Of course the man is entitled to exemption from draft.

But the ophthalmoscope is not the only means at the service of the inspector. He may not feel confident of his diagnostic skill with the instrument. For a case of feigned dimness of vision it is indispensable; but if a man pretend falsely to have one eye blind, the cheat may often be quickly detected by the use of a prism. This is a suggestion of Prof. Graefe. Lead him into a dark room where there is but one lighted candle. Do not let him look at the light until a prism, say of 10° angle, shall be put before the "blind eye." Ask him how many lights there are, and he may say "two," when his deceit is exposed. If he do not get tripped in this way, hold the base of the prism towards the temple, and bid him look steadily at the light to be sure that there is but one. By looking fixedly for a minute or two, he will really come to see but one image; the muscles of the eyes instinctively adjusting themselves to effect this object. Then suddenly remove the prism, and the reputed blind eye will be seen to quickly assume another position in looking at the light. At the instant when the prism was withdrawn the man saw double images, then the eye turned inwards to recover single vision, proving the fact of vision in the eye in question. Another crafty device is to rotate the prism, and the man may assert that one of the lights is being moved upwards, downwards, etc., as the base of the prism is being turned downwards, upwards, etc., in a manner contrary to the direction in which the light appears to go. The physical illusion may thus disclose the moral deceit.

The possession of but one blind eye, especially if that were the left, might not exclude a man. If he profess to be *wholly* blind, the ophthalmoscope is the detective, but a man must have considerable medical knowledge and tact to avoid condemning himself under a critical cross-examination of his symptoms.

Another disease often assumed, or concealed, is near-sightedness. When it is falsely pretended to, it may be almost certainly exposed by requiring the man to read fine print held closer to the face than is possible for normal eyes. The ophthalmoscope, however, gives accurate testimony upon the refractive powers of the eye as well as upon the state of the tunics. By it one can recognise the near-sighted, the normal, and the far-sighted eye. These classes are distinguished, not by their capacity of seeing near objects, but of discerning distant objects. The near-sighted eye can see at a distance, only by aid of *concave* glasses; this is myopia. The normal eye requires no aid from the optician. The far-sighted eye needs *convex* glasses; this is better called hypermetropia, was formerly called hyperpresbyopia; the latter name is now going out of use.

In discovering these anomalies, we do not use the double convex objective lens, which furnishes the inverted image, but use only the ophthalmoscopic mirror, and seek to get an upright image of the fundus oculi. To do this the pupil must be widely dilated, and the power of accommodation annulled, therefore the solution of atropine must be of strength of gr. iv. ad ℥j., or a weaker solution be used several times during an hour.

In a normal eye, when its accommodation is entirely at rest, the retina lies exactly at the focus of the transparent media. The images of objects at a distance will be formed distinctly upon it, because the light comes from them nearly in parallel lines. Conversely, light proceeding from the retina out of the eye, will, after passing through the media, be transmitted in parallel lines. This is a well known law in optics. If an observer be so placed as to catch the light issuing from the retina, and if he adjust his own eye for parallel rays, he will get an image of the retina. If he bring his eye to within half an inch of the patient's, and still maintain the adjustment of his own vision for distant objects, he will see not only retinal vessels, but all or nearly all of the optic nerve at once. If, however, he withdraw to twelve inches' distance, he can see but a small bit of a single vessel, and that more magnified than before. As his distance increases the field contracts in area, and the magnifying power increases. At the distance of twelve inches no useful inspection of a normal eye can be had by the upright image; usually there appears only a reddish glare, with no distinct details.

How is it with the myopic eye in its refractive phenomena? I purposely omit mention of important lesions found in a large class of myopic eyes, which are so because of posterior staphyloma of the sclerotic. I deal only with the dioptric peculiarities. In these eyes, the retina lies beyond or behind the principal focus of the ocular media. Light coming from distant objects forms an image in front of the retina, and casts upon it only circles of dispersion, because the rays impinge upon it after having crossed each other.

What is the behavior of light coming from the retina out of the pupil of a myopic eye? Reference to a simple law of optics will show, that representing all the media by a single lens, and knowing the retina to be situated at a point further from the lens than its principal focus, the rays of light after transmission will be made more or less convergent, will ultimately cross each other, and at the point of crossing will form an image of the retina. This image may be at two inches or thirty inches distance from the patient's eye. The further the retina lies from the lens, the nearer will be the situation of the image, and the more intense the myopia; while vice versa, the slighter

the myopia, the more nearly does the retina approach its true position in the principal focus of the lens, and the more distant the image becomes, because the emergent rays converge less rapidly. If this image is formed at a greater distance than twenty-four inches it will be difficult of observation, because a normal eye requires to be six inches removed from the image for its perception; this added to twenty-four makes thirty inches as the total distance between the patient and observer, at which distance the illumination by the mirror becomes too feeble. Therefore in cases of moderate myopia, those less than twenty-four, the observer, to get a view of the fundus, must use a concave glass to make the convergent rays parallel or divergent. If he place himself at twelve inches' distance he would need a concave lens for cases of myopia of six or seven. At this distance he will only see small parts of retinal vessels; they will appear clearly defined, and the apparent size less than in a normal eye. At twelve inches' distance, the visible field is necessarily small, and no proper exploration of the retina is in this way possible, but sharpness of definition and facility of discovery of the retinal vessels of a moderately myopic eye will arrest the observer's attention; the eye cannot be of normal refraction. To prove the abnormity to be myopia, let the observer approach to within an inch, or, if possible, closer to the eye; instead of getting a larger field and better view as in a normal eye, he would be able to see nothing at all. This settles the diagnosis of myopia, but does not determine its degree. This can be approximated to by finding how strong the concave glass needs to be to see the fundus from a given distance, say of three inches, the observer's visual power and seeing distance being known, and the concave glass found by trying one after another. In an admirable treatise upon the Ophthalmoscope, by Dr. Adolf Zander (Der Augenspiegel, seine Formen, und sein Gebrauch. Leipzig und Heidelberg, 1862), he gives a table for finding the exact concave glass needed when the patient's myopia is known, and also the observer's seeing distance. I aim only to show how in a simple but decisive manner the existence of myopia may be proved or disproved.

Again, there are phenomena peculiar to refraction in a hypermetropic eye which are easily appreciable to the ophthalmoscope. In this case the retina lies in front of the principal focus of the refracting media; it lies too near to the lens. Distant objects would form their images at a point behind the retina, and by intercepting their rays before they cross, it receives only diffused light. Tracing the course of the rays as, when proceeding from the retina, they pass out of the eye, we find that because they come from a situation nearer to the lens than its principal focus, they continue divergent in a greater or less degree, according to the degree of hypermetropia. But in such a case the fundus ought to be easily visible, because we are accustomed to see all objects by diverging and parallel pencils of light. Such is the fact. At twelve inches you see the retinal vessels as clearly as in a decidedly myopic eye, much more so than is ever possible in a normal eye. As you approach more closely the extent of field increases, the sharpness of outline and amplitude remain the same. Eyes like this require convex glasses for distant objects; extreme illustrations of this defect are patients who have been operated for cataract.

En resumé of these distinctions between normal refraction, myopia, and hypermetropia, in their ophthalmoscopic adjudication—the pupil being widely dilated and the observer supposed to have normal vision.

At twelve or eighteen inches' distance:—in the normal eye vessels are indistinctly visible, the field small, only a small part of a vessel visible, and that highly magnified. In the myopic eye, where the degree is moderate, nothing is seen. If the degree be intense vessels are sharply defined, the field large, the amplification slight. In the hypermetropic eye, vessels are well defined, the field small, amplification greater.

At two inches' distance:—in the normal eye, vessels become distinct, the field larger. In the myopic eye, nothing is visible of details. In the hypermetropic, the field is larger, vessels distinct, amplification about the same.

I may not conclude these remarks without allusion to a well known method of discerning myopia. This is by the use of concave spectacles. In the Austrian military service the rule adopted is that those persons are unfit for service, who, with concave glasses of six inches focal length, can make out print or characters half a line high and of corresponding breadth, at less than six inches' distance from the eye. In this way a judgment may be rapidly made, and those who are highly myopic easily eliminated. The print or characters alluded to are equivalent to what we know as "pearl," which is No. 2 of Jæger's scale. It is impossible for a normal or hypermetropic eye to read this with concave six at less than six inches distance. A myopic eye which requires a glass —12 or —14 may do it: those less than this cannot, those greater than this will. This test excludes those who are anxious to prove their myopia, but does not detect a slight degree of myopia in one who seeks to enter the army. For this purpose, the ophthalmoscope becomes necessary.

Lastly, a case of amblyopia is sometimes mistaken for an abnormal state of refraction, because such persons sometimes use spectacles. They sometimes use convex glasses for reading, simply as magnifying glasses. I have also seen a person with very dim sight because of advanced choroidal disease, use a deeply concave glass to see distant objects, such as the numbers of houses and the names of streets. Inspection with the ophthalmoscope would at once explain the true state of the eye, what the amblyopia depended upon, and also if it were combined with real abnormities of refraction.

273 Fourth Avenue, New York, August 18, 1862.

CASES

TO SERVE IN THE HISTORY OF THE RELATION WHICH EXISTS BETWEEN

PUERPERAL FEVER AND EPIDEMIC ERYSIPELAS.

By M. PIHAN-DUFEILLAY,

interne des hopitaux, member of the societes d'anthropologie anatomique-medicale d'observation.

[Translated from the French of the Union Medicale, by Dr. P. F. C Deslandes, of New York.]

(*Concluded from* p. 88.)

The ordinary coincidence of puerperal fever and traumatic erysipelas is admitted. No matter whether these two diseases act over each other and mutually engender each other, or whether the wounded and lying-in women be the victims of two accidents totally distinct, having the same origin; the essential point is to admit this identity of the cause, which so many chemists acknowledge without owning it clearly. Now, it constantly happens that one same cause produces only effects of the same kind, except the secondary modifications which its effects undergo, in proportion to the qualities and properties peculiar to the subjects which are submitted to its action. In virtue of this principle our lying-in women, and those out of the puerperal state, having been exposed to the same cause of infection, the latter must have acted on their organism in the same way, but with a rapidity proportioned to their predispositions, their debility, their force of resistance, the energy and integrity of their nutritive functions. Therefore, did we see our lying-in women debilitated by the fatigues of gestation, the efforts and the pains of labor, the hæmorrhage of delivery, attacked within the twenty-four or forty-eight hours after confinement. On the contrary, erysipelas made its appearance at the end of five, six, seven days, and sometimes much later in those women in good health, and consequently more able to resist longer external impressions. But this morbid influence once felt, the anatomical

modifications which accompany it, having neither constancy nor fixed place of election, it will follow that these manifestations will be expressed by the lesion of the organs whose vitality is excited, and which their irritation predisposes to become the seat of serious changes. In the lying-in women it will be the lymphatic vessels and veins of the uterus, the uterus itself and peritoneum—hence, puerperal fever with its complications, so frequent, of lymphangitis or of uterine phlebitis, of metritis and peritonitis. In the wounded, in whom the venous and lymphatic system is injured, also, it will be lymphangitis, erysipelas, and purulent absorption. On the subject whose skin, hardly excoriated, presents but few irritated lymphatics, it will be lymphangitis and erysipelas. If we view the local lesion in this way, although we recognise the anterior existence of the general affection, which alone, to tell the truth, constitutes the disease, we find the explanation of its most marked symptom, the erysipelatous eruption which, in the women submitted to our observation, had always for a starting point a slight solution of the continuity of the skin.

The examination of the general symptoms, the study of the really serious phenomena which characterized the disease, rendered the prognosis uncertain, and brought on the death of one of our patients, fully corroborate the opinion we have just stated of one same morbid cause producing two effects of the same kind, which are distinguished only by some of their accessory phenomena. These secondary phenomena, superadded, to a certain extent, to the principal disease, and whose intensity could change the symptoms proper to the primitive disease, are peritonitis and its own proper symptoms in puerperal fever, inflammation of the lymphatics, tumefaction of the face, sympathetic cerebral reaction, lesion of the mucous membrane of the larynx, or erysipelas. Apart from special symptoms which inflammation of the peritoneum and that of the skin and lymphatics of the face bring with it, we find in puerperal fever, as well as in our erysipelas, a collection of symptoms so peculiar, so complete, so characteristic, that it must have struck all those who at that time followed the clinic with any attention. The patient is suddenly taken with chills, rather violent; fever appears; diarrhœa supervenes spontaneously or only at the end of thirty-six hours; the breath is fœtid, the tongue dry and fuliginous; there is extreme depression, then immobility and prostration, an indifference disproportioned to the intensity of the local accidents; dyspnœa appears within twenty-four or forty-eight hours, without appreciable anatomical cause, as if the globules of the blood had lost, as was shown by Vogel in true puerperal fever, the property of complete hæmatosis; there is until death some nocturnal subdelirium without agitation, with clearness of the intellect during the day; lastly, the pulse remains all the time very quick and small. Does not this picture represent the summary of the three cases of erysipelas given above, as well as a short description of the pathognomonic symptoms of the typhoid form of puerperal fever, one of the most grave varieties of this disease, and that to which most of our lying-in women fell victims? Add to the above symptoms, for some, abdominal pains, tympanitis, vomiting of green matters, and a contracted facies (facies grippé) testifying to the peritoneal complication; for the others the erysipelatous redness and swelling of the face, the difficulty of speech, the absence of abdominal symptoms, and you will have the complete description of the phenomena presented by our patients attacked with erysipelas, and those affected with puerperal fever. Let us compare this erysipelas, which yields to none in intensity, with simple erysipelas, and even with bilious or mucous erysipelas, which come nearer to it, and we shall find there neither vomiting, nor frequent delirium, nor the slow pulse, nor the diarrhœa, nor even the constipation which characterize this form; moreover, we will meet with symptoms which do not belong to simple erysipelas, so that if we wished to compare with the symptoms of another disease the phenomena which succeeded each other in the erysipelas whose history we are now giving, it would not be among the other varieties of inflammation of the skin, but only in typhoid puerperal fever that we would be able to find a unity of comparison.

One more remark on the eruption, the march of which presented something unusual in the way in which the erysipelatous growths (poussées) succeeded each other, invading several times the same parts, reappearing when the symptoms seemed to be about to disappear, and prolonging the disease for such a long time that the only means of obtaining the cure of some of our subjects was to send them out of the ward. These relapses, mentioned as rare by classical authors, are referred by them to the bilious and mucous varieties of erysipelas, in which the general symptoms predominate, and which are assimilated to malignant fevers by most physicians. Some have gone further, and have, basing themselves on observations, given this symptom as constant in erysipelas due to the miasma of puerperal fever. For us who are ignorant of the value of this symptom, we will simply state that it was striking in those cases we have observed, and that these facts agree fully with the examples cited, and the opinions expressed on this subject.

Post-mortem furnished us unfortunately with signs of but little importance for the solution of the problem which engages our attention. The characteristics of the erysipelas and puerperal fever remaining yet to be found, the lesions we have observed have quite a secondary value from which it is impossible to arrive at a precise conclusion. However, they are rather favorable than contrary to our opinion; the spleen was softened and hypertrophied, the blood, thick viscid, darkish, coagulated in diffluent clots, characteristics already observed in some erysipelas, and which belong to this disease as well as to typhoid affections and puerperal fever. The peritoneum was injected, but we think this lesion supervened during the last twenty-four hours of life: therefore we mention it, without daring to interpret it.

One word more of the change observed in the mucous membrane of the larynx at the autopsy. Whatever might have been its origin or nature, sure it is that we have observed it in two other cases, where the patients died of infectious erysipelas contracted in the surgical wards, where it remained among the wounded. One, suffering from a sprain, was observed by us at the Hôtel Dieu, in the service of Mr. Robert, where he died of spontaneous erysipelas of the face, with symptoms analogous to those met with in the women at St. Louis. The other died at the same period in the surgical wards of La Charité; and we examined the larynx presented to the Société Anatomique, by Mr. Guéniot. Is it not singular that identically the same lesion should have been met with in two subjects who died from the epidemic erysipelas common to the surgical wards, and in a woman placed outside of any condition of traumatism and crowding, but submitted to the influence of puerperal miasma? Notwithstanding the importance of such comparison (rapprochement) it would not of itself suffice to settle so difficult a question; and it would be venturing too far to base oneself on the similitude of these three alterations to conclude as to the identity of the cause that produced them—and hence, as to the unity of the principle of puerperal fever, traumatic erysipelas, and spontaneous erysipelas. Therefore, do we only point it out; it belongs to men better qualified than we to deduct the consequences, and to indicate the relations which unite all these affections.

Although the facts we have given seem to leave but little doubt as to their etiology and nature, we strictly confine ourselves to the rôle of observer. Having related what we have seen, we will take good care not to discuss a subject so embarrassing, and which our masters treat so differently. We wished to give to our cases only the value of an exact information, and we leave to others the care of interpreting them.

The death of one of the most illustrious of the members of the French Academy of Sciences is announced—of M. de Sénarmont.

Reports of Hospitals.

NEW YORK HOSPITAL.

AMPUTATIONS OF THIGH AND OF FOREARM—SYME'S OPERATION—DISLOCATION OF THIGH—VARICOCELE TREATED BY LIGATURE—REMOVAL OF FRACTURED END OF TIBIA, ETC., ETC.

[Reported by JOHN T. KENNEDY, M.D., Acting House Surgeon.]

(*Concluded from page 92*)

IV.—*Amputation of Thigh for Osteo-Sarcoma of Leg.*—Andres Cator, æt. 19, private 48th New York Volunteers, was admitted July 18th. He stated that seven months previously he had first noticed a swelling on the outer side of right leg about its middle, which prevented him from being on duty for two or three days at a time; but that recently he had been incapacitated for any work whatever. The tumor had increased rapidly within a few days, so that at the time of admission it extended from the ankle nearly up to the knee-joint. The circumference of the swelling at its most prominent portion measured seventeen inches. Sharp pains were complained of in the tumor, from time to time, ever since its first appearance. There was no hereditary predisposition to cancer. On the 21st inst. a consultation was held, as a result of which the thigh was amputated at the juncture of the upper and middle thirds. The flap method was adopted, the edges of the wound brought together by sutures and adhesive plaster, and the whole covered with cold water dressings.

An examination of the tumor by the microscope showed it to be unmistakably malignant. It involved the whole of the shaft of the fibula, the tibia being free from the deposit.

Recovery took place without any complications.

V.—*Amputation of Thigh for Gunshot Wound of Knee.*—Patrick McGowan was wounded at the battle of Fair Oaks, eighteen days previous to admission. The ball entered at the outside of the left patella, and lodged, as was supposed at the time, in the popliteal space. An incision was accordingly made in that situation, but failed to discover the ball. At the time of admission the wound in the popliteal space had healed, while at the entrance of the ball there was an ulcerating surface about the size of a twenty-five cent piece. In the course of the third or fourth day after admission the knee became very painful and much swollen. This condition of things gradually increased, and pus accumulating in the joint an incision was made on the fifteenth day, giving vent to a profuse discharge. During all this time the strength of the patient had been very much depressed. Continuing to run down, and life being in jeopardy, a consultation held on the twentieth day, advised an operation as a *dernier ressort*. The thigh was amputated at the junction of the middle and lower thirds by a circular incision. In order to give the patient every chance to recover, the operation was performed in the ward, and he was immediately after placed upon his bed.

The wound in the severed limb was then examined, and was found to have been inflicted by a buckshot, which had opened the joint and buried itself in the outer condyle of the femur.

Immediately after the operation the patient seemed to rally very satisfactorily, and remained in a promising condition for several hours, at the end of which time he began to sink, and died in the course of twenty-four hours after the operation.

VI.—*Crushed Hand—Fracture of Radius—Amputation of Forearm—Purulent Infection, etc.*—Frank Bowman, æt. 42, a German tailor, was admitted June 4th, and was unable to give any satisfactory account as to the manner in which he received his injuries. His friends, who accompanied him, however, stated that a short time before, while lying asleep on a railroad track, he was run over by the train. His right hand was found badly crushed at the radio-carpal articulation, the wound communicating with a fracture of both bones of the forearm near their middle. The vascular supply was completely cut off from the hand below, it being cold and insensible. Besides these injuries there was also present a simple fracture of the left radius near its carpal extremity (Colles'). There was not much shock.

The left forearm was placed on a straight palmar splint, and secured in position by strips of adhesive plaster. The patient was then etherized, and the right forearm was amputated near its middle by the double flap operation. The tissues in the neighborhood of the wound were dark-colored, but were possessed of a sufficient vitality to promise good union. The general condition of the patient was very good for several days, when a rather extensive burrowing took place, followed by purulent infection. Abscesses formed on the head and in the joints, causing the patient gradually to sink. He died of pyæmia about two months after admission.

VII.—*Crushed Foot—Syme's Operation.*—W. S. Maynes was brought to the hospital on the 26th of June, suffering from a severe and extensive wound of the foot which he received in a saw mill. It was badly crushed in a lateral direction, the toes and metacarpal bones being crowded promiscuously together. Syme's operation was performed as soon as the patient recovered from the shock, and the recovery has been perfect.

VIII.—*Dislocation of Femur on Dorsum Ilii—Reduction by Reid's Method, with the aid of Anæsthesia.*—Pat'k McGowan stated, that on the 7th of June, immediately before admission, he was caught between the buffers of two railroad cars, one striking the left hip and the other the knee of the same side. On examination the head of the femur was found luxated on the dorsum ilii, the foot being everted and the limb shortened three and a half inches. The reduction was effected under the influence of chloroform by Reid's method without any difficulty, and the two limbs afterwards bandaged together in an extended position. On the 21st the patient was allowed to get up, and on the 27th was able to walk out of the hospital on crutches.

A second case of dislocation of the femur was also treated in the same service, but the head of the bone was displaced in the ischiatic notch. The same method of treatment was adopted, and in ten days subsequently the patient was able to walk about.

IX.—*Varicocele Treated by Ligature.*—Thos. Dolman, æt. 21, a native of Ireland, and a carriage maker, presented himself for treatment of varicocele on the 12th of June. About a year previous he first, accidentally, noticed that the scrotal veins on the left side were enlarged. This he at once referred to the frequent and violent exertion which he was accustomed to make. The presence of the disease became in time, to him, a great source of annoyance and discomfort, and he at length decided to submit to an operation for its removal. He accordingly gained admittance into the hospital for this purpose. The scrotum was found very lax and redundant, and the scrotal veins were very much enlarged, presenting the usual tortuous appearance. On the 16th the patient was etherized, when the bundle of veins were carefully separated from the vas deferens and ligated in three places, the skin between each ligature and its vein being divided. A similar operation to this was performed during the same month and with the same result.

X.—*Fistula in Ano, Treated by Ligature.*—A case of fistula in ano was treated by ligature with a very satisfactory result. The patient, a merchant, 30 years of age, had suffered from a fistula to the right of the anus for upwards of a year, when he placed himself under treatment. A curved eyed probe was introduced into the opening armed with a stout silk ligature, which was brought out by the anal opening and simply tied. The patient was then allowed to leave. The ligature gradually separated, and when he reported himself in the course of a fortnight or three weeks, the wound had healed and he was entirely cured.

XI.—*Compound Fracture of Leg—Sawing off of Lower*

End of Upper Fragment.—Adam Edwards, æt. 35, a native of New York, coachman; was thrown from a horse, receiving a compound complicated fracture of the right leg a short distance above the ankle. The wound in the soft parts was for the most part situated anteriorly, and the lower end of the upper fragment of the tibia protruded through the wound in such a manner as to render it impossible to reduce the fractured portions. This end was sawn off to the extent of two inches, when the limb was brought out in a straight position and properly adjusted in a fracture-box. The patient is now doing well, new bone forming from the periosteum which was left, and the promise is that there will be very little shortening.

This case is interesting only as an example of conservative surgery. In times gone by such an injury would have been a sufficient excuse for immediate amputation.

There has been performed a very interesting operation of removal of a tumor from the shoulder of a patient who had previously suffered amputation at that point, but as it is the intention of Dr. Briddon, who had charge of the case previous to admission, to give all the points in detail, it is but due to him that he should not be anticipated.

Progress of Medical Science.

RECENT DEATHS UNDER CHLOROFORM.

The terrible frequency of deaths consequent upon the administration of chloroform for surgical purposes is a matter which cannot be regarded with indifference. Two deaths are now to be recorded, both under somewhat noteworthy circumstances.

John Emanuel Hill, of Norwich, aged sixteen years, was one of these unhappy persons. From the evidence given at the inquest, and the remarks of the coroner, we gather that the lad was the subject of disease of the bone of the great toe, the result of injury. He was placed under chloroform by Mr. Willis, not a qualified medical man, in the presence of Dr. F. C. Holland and Mr. Crawford Bell, both qualified practitioners, but said to entertain homœopathic views. Dr. Holland stated that the patient was a very healthy young man, that from a careful prior examination he was satisfied there was no disease which would render the inhalation of chloroform dangerous, that a very small quantity of chloroform was administered, and that the patient died in five minutes from the commencement of the inhalation. We pass over the statement of Dr. Holland, that from the first he considered that *nothing would save life* but amputation of the toe; and we only call attention here to three facts: the quantity of chloroform does not seem to have been measured; it was administered by an unqualified person, without using any apparatus for determining the proportion of chloroform in the inspired air; it was employed for a minor operation. The second case is that of Pierre Pelletier, aged thirty-three, the subject of fistula. His physician had examined the head and heart prior to causing chloroform to be administered, and found nothing to create doubt. However, the patient died under chloroform. Mr. Gant, of the Royal Free Hospital, found the heart and lungs extensively diseased; the disease of the heart is described as "atrophy." Mr. Gant commented, apparently with some severity, on the mode of administration, and the laxity of the prior examination of the deceased. The physician, however, appeared to have taken most of the usual precautions, and he was properly acquitted of all criminal implication in the death of the patient. But here, too, it is proper to point out that the chloroform does not appear to have been given in measured quantity, that no apparatus was employed for regulating the admixture of air, and that the operation was one of a minor character. These conditions have now been found concurrent in so very large a proportion of fatal cases, that we cannot but continue to attach to them the importance which we have always maintained to belong to them.

Some dozens of lives have now been sacrificed by the administration of chloroform for the extraction of teeth, the removal of superficial sebaceous tumours, amputation of toes and fingers, and other trifling operations. Although Dr. Holland went to the extreme point of saying that he considered from the first that nothing could save his patient's life but amputation of the toe, yet it may be properly assumed that the affections mentioned do not involve issues of life and death. Moreover, we would point out that the facilities for procuring local anæsthesia are too much neglected in these cases. The removal of superficial tumours, the evulsion of nails, and the incision of abscesses, may be performed with the most complete absence of pain if the part be previously refrigerated by the well known mixture of ice and salt. The most painful of minor operations is the evulsion of the great toe-nail. Mr. Ernest Hart recently stated at the Medical Society of London that he had more than once performed this operation with the aid of the freezing process, the patient being completely unconscious of pain. It is sometimes complained that this process is tedious in its application; but to insure rapidity, it is only necessary that the ice should be very finely powdered, or, what is better, flaked with the end of a knife or cucumber-slice. It has lately been stated that the local application of chloroform in a particular manner, which we recently described, causes anæsthesia of the part; the application of compresses steeped in solutions of aconite has produced the same effect. The more general application of local anæsthesia is a means of diminishing that considerable mortality from the use of chloroform which must justly increase the growing fear with which the profession and the public regard that useful and beneficial agent. There are some features in many of the cases ending fatally which seem to show that a false security has been engendered as to the use of this agent. Dentists, druggists, and practitioners of but limited experience, are found administering chloroform under very trivial inducements, and omitting those precautions with which some of the most experienced and accustomed chloroformists would not venture to dispense. No prior examination, or a very imperfect one, is made; the chloroform is not measured; no apparatus is used; the admission of air is regulated by a rule of thumb; the pulse and respiration are not systematically watched and noted; and death occurs. It is highly desirable that a stricter *régime* should prevail, and that the administration of chloroform should not be thought or spoken of, or practised as a light matter. We protest against its employment where local anæsthesia may be substituted, where unskilled persons are the agents, where proper examinations and watchful supervision are not instituted, where provision is not made for its careful measurement and the regulated admission of 95 per cent. of atmospheric air, and where means of resuscitation are not apparently provided. The frequent recurrence of deaths by chloroform is a veritable misfortune to humanity and to science; it is one against which we are bound to employ all the care and forethought which are applicable to its prevention.—*Lancet.*

Chicago City Hospital.—The building was erected by the city at a cost of seventy-five thousand dollars. It is pleasantly located, its wards are spacious, and the arrangements for ventilation and bathing are perfect. It contains a Medical, Surgical, and Obstetric Department; also a special department for the Eye and Ear. Private patients may occupy separate apartments, and will be admitted from any part of the county by paying from $3 to $5 per week for board, washing, nursing, and medical attendance. Ephraim Ingalls, M.D., and Joseph P. Ross, M.D., *Physicians.* Joseph W. Freer, M.D., and Geo. K. Ameeman, M.D., *Surgeons.*

American Medical Times.

SATURDAY, AUGUST 23, 1862.

MEDICAL MEN IN COURTS OF LAW.

The value of medical evidence in questions involving the causes and nature of deaths by unknown means has now been recognised nearly three centuries and a half. During this long period it has frequently demonstrated its accuracy of investigation of the subtile forces which destroyed life, and led with unerring certainty to the detection of the criminal or the exculpation of the innocent. In this field of research no other class of scientific experts can supersede the medical witness. His conclusions are based on an accurate knowledge of physiology, pathology, anatomy, chemistry, and the physical sciences, together with those attendant circumstances which are open to the observation of every one. The special knowledge which the medical witness is supposed to have, gives him the position of a skilled person, or one who is capable of deciding questions beyond the comprehension of ordinary witnesses. The position of the medical witness therefore becomes one of great importance to the cause of justice and truth, as well as of great responsibility. The courts of law are accustomed to accord to his testimony great value, and to regard his opinions with the most profound respect. To sustain well the high character of the medical expert in courts is not a trivial undertaking. In the first place, no small amount of kuowledge of the medical sciences in general, is requisite to cope with the abstruse and obscure questions to which medico-legal questions give rise. There was a time indeed when surgeons only were allowed to testify as to the wounds of murdered persons in English courts, but that period has passed, and to-day the medical witness is expected to bring to the stand the most profound knowledge of his profession in all its departments of scientific investigation. In the second place, he must be an acute and logical reasoner in order to place the facts which he has drawn from science and from the surrounding circumstances in such harmony of relation, as to make an unbroken chain of logical sequences. We might add as a third qualification, and which is the most important of all in the interest of justice—a perfectly disinterested mind, devoted only to the discovery of the truth.

We have frequent and painful proofs that medical men do not always appreciate the responsible and truly dignified position which they are called to fill in courts of justice. Forgetful that they are presumed to be experts, or persons whose scientific attainments give their opinions great weight, and above all that they are unbiassed by any circumstance connected with the case, except positive and unquestioned facts, too frequently the medical witness takes the stand, an avowed partisan, and shapes his evidence to sustain some personal interest or preconceived notion. Nearly all the cases of trials for alleged mal-practice have their incipiency in the malicious suggestions of a medical man, who subsequently comes upon the witness-stand as an expert in settling the many questions in which he has a personal interest. The position of such a witness is unenviable in the extreme. He is unworthy the name and association which give him such power for evil, and should be discountenanced by every means which we possess in our individual or organized capacity. The injury which such men inflict upon their brethren is incalculable; many are made to incur heavy expenses, others are mulcted in damages, which afterwards hang heavily upon their resources, while a few are discouraged and driven from the profession. It is the duty of local societies to make stringent regulations in regard to that class of physicians who incite a prosecution for mal-practice. The case should be investigated rigidly, and if the evidence convicts, the name of the guilty party should be stricken from the membership of every medical organization.

Important as is the position of the medical man in courts of law, when upon his opinion rests the fair fame of a brother practitioner, it bears no comparison to those cases in which the life of an individual is trembling in the balance. The responsibility which falls upon the medical witness in trials of suspected murder, is more weighty than that which occurs in any other relation of life. He assumes, indeed, to determine with more accuracy than can any other witness who did not actually see the act committed, the nature and causes of the death. His opinion is based upon an analysis of facts, often extremely subtile, and generally susceptible of various explanations. How important that his mind should be entirely free from all preconceived theories, and that he should be uninfluenced by position or prejudice. And yet we have occasional instances of medical witnesses exhibiting a degree of feeling altogether incompatible with that dispassionate search after truth, which should characterize the expert.

Medical witnesses, also, occasionally seem forgetful of or at least disregard professional courtesy, and manifest towards the opinions of their brethren a degree of contempt quite unworthy of their high position. In the history of a recent murder trial in this State, we have a melancholy example of the rancor which one medical witness may exhibit towards another, growing out of a mere difference of opinion. Accusations of dishonesty, falsehood, and sinister motives are as unqualifiedly made against a member of the profession of irreproachable character and of the highest respectability, but a differing witness in the case, as if the parties were in a common street brawl. One witness taunts another with being paid for his services, as though that were a crime, and at the same time announces that he himself received nothing, as though that were a virtue, and gave greater impartiality to his opinion. Every physician who resorts to such unworthy and unprofessional means in a court of law, only degrades himself.

We could wish that in this country, at least, the medical profession would study more thoroughly forensic medicine, and come to appreciate the true dignity of a medical witness. The courts accord us the highest position in the scale of evidence, and it is exceedingly important that we do not abuse or lessen their confidence.

THE WEEK.

The medical inspection of enlisted men is, as far as we can learn, a most shallow farce. Under the pressure of a per caput fee, the inspecting officer aims to increase the numbers which he daily passes to the largest possible extent.

A single inspector has been known to examine two hundred and fifty persons in eight hours; thus giving less than two minutes to each. It is notorious that the troops from the State of New York, of the regiments sent out last year, had every manner of disability. Even cases with double hernia of large size, were endorsed by the inspecting officer. These abuses should be promptly corrected. It has recently been announced that Dr. CHARLES MCMILLAN, formerly Medical Director of General PORTER's Division, army of the Potomac, has been assigned to duty on Governor MORGAN's staff. We hope it will come within the duties of this officer, who is thoroughly familiar with the wants of the service, to reform the system of medical inspection which is now rapidly filling the army with worthless soldiers.

—

GREAT attention has recently been given to the issue of consanguineous marriages, principally from the interest which the paper on this subject in the Transactions of the American Medical Association excited. Similar investigations have been made in England and in France. The last which we have met with is by M. BOUDIN. The following conclusions will prove of interest:

"That these marriages in France are about 2 per cent. of the whole of the marriages of the country; that the proportion of the born deaf and dumb issuing from marriages of consanguinity is, in relation to the whole number of born deaf and dumb, at least 25 per cent. at Lyons, 28 per cent. in Paris, and 30 per cent. in Bordeaux; that the proportion of born deaf and dumb increases with the degree of consanguinity of the parents. If 1 represents the danger of producing a deaf and dumb child in an ordinary marriage, the danger is 18 in the marriages of cousin-germans, 37 in the marriages of uncles and nieces, and 70 in those of nephews and aunts. At Berlin, 1 deaf and dumb is found among every 10,000 Catholics, 6 in every 10,000 Protestants, and 27 in every 10,000 Jews. In other words, the proportion of deaf and dumb increases with the facility accorded by different forms of worship to unions of consanguinity."

—

THE practice of extirpating a diseased eye to preserve a healthy one is disapproved of by Sichèl, the Freneh oculist. The following are stated to be his views:

"With regard to the extirpation of a diseased eye, practised for the purpose of preserving the sound one, M. Sichel says that it is an operation which has been greatly abused of late. It is undoubtedly true that a disease in one eye may at last affect the healthy eye; but affections of this nature very often depend upon constitutioual causes; and, when this is the case, it happens that the healthy eye becomes at last affected as the result of the diseased constitutional conditions. The extirpation of the eye primitively affected cannot in any way cut short the influence of these constitutional causes upon the healthy eye. The general affection of the body was the original cause of the ocular disease, and is also the cause which keeps up the disease; and the right treatment, therefore, for the preservation of the healthy eye, is to attack by therapeutics the general affection. M. Sichel also remarked, that his observations of the good effects of general treatment in diseases of the eye had often led him to combat the too frequent tendency to surgical operations in these diseases."

—

A CASE was recently tried in England, involving the question of the proper disposition of the "dissected fragments of humanity, as they pass from the schools to the burial-ground." The law requires that the bodies of dissected persons shall be "decently interred in consecrated ground." Counsel contended that "inasmuch as the burial service was intended as a solemn rite for the consolation and benefit of the living, its performance in the absence of all witnesses over the decayed fragments of a dissected body was improper and unbecoming." The judge, however, overruled this opinion, and decided that the remains "should have the burial service read over them."

Reviews.

THE CHICAGO SANITARY COMMISSION. Second Report. Chicago: 1862.

FROM the second report of this Commission we have most gratifying evidence of the success which has attended its efforts to distribute the charities of the people among the sick and wounded. The following extracts will give some insight into its operations:—

"FINANCIAL STATEMENT.—It will suffice to state in this place, that the receipts in money during five months have been $12.434,43, of which $5,000 were contributed by the Common Council of the City of Chicago from the public funds, and $2,000 by the Chicago Board of Trade from its Treasury. Not a few individuals have also given liberally, some from their wealth and others from their poverty. The expenditures for the same time have been $10.702,74."

"TO WHAT PLACES SENT.—We have sent, during the past five months, 1427 boxes and packages of goods from our rooms in Chicago, many of which were valuable medicinal stores, purchased in this city by the Commission, to supplement important deficiencies in the supplies of the United States. The distribution has been to the hospitals and camps at and near Cairo, Paducah, Pittsburg Landing, Hamburg, Savannah, and Corinth, and also to a small extent to Missouri."

"NO DISTINCTION MADE AS TO TROOPS.—Some have supposed that the Commission have been partial to the troops from Illinois in the appropriation of the supplies furnished; but the apprehension is quite unfounded. We never inquire after the State from which the suffering soldiers come, but aid all who are on our field of operations in the army of the West. We have received liberal supplies from Wisconsin, Michigan, and Indiana, as well as from our own State, and we have made corresponding use of our stores, both in supplying regimental and post hospitals, and the General Hospital at Mound City, and in furnishing the boats detailed to transport the sick and wounded. Twice we fitted out (at an expense of *one thousand dollars*, on each occasion, for *medicinal supplies simply*, in addition to boxes of clothing, &c.), steamboats sent for the purpose of bringing home Illinois soldiers, by our Governor; but the money was contributed for that express purpose by the Chicago Board of Trade. We did a similar act out of our general funds for the boat sent by the Governor of the State of Wisconsin. We tendered similar aid to the Governor of Michigan by a letter, to which no answer was received."

"ENLARGEMENT OF OPERATIONS.—Mr. Thomas P. Robb observes in his report—The amount of supplies shipped up the Tennessee river has been truly wonderful, and it gives me great pleasure to inform you that your Commission and the State of Illinois stand at the head of the list. The shipments of the Chicago Sanitary Commission have been more than double any other Society of the kind, and most certainly no other State officers have used the same untiring efforts, as those of Gov. Yates, Col. Moses, and Secretary Hatch, in behalf of the sick and wounded. Great care is taken by Drs. Douglas and Grimsted, that all requisitions are faithfully and properly applied, and in no instance do they fill requisitions with articles not needed by the sick and wounded. Since the battle of Shiloh, I have known the weekly distribution of Sanitary Stores to run as high as five thousand dollars."

"SOLDIERS' HOME AND DEPOT OF SUPPLIES AT CAIRO.—To no result of our labors during the past five months, can we point with greater satisfaction than to the establishment, at the suggestion of Dr. J. H. Douglas, of the U. S. Sanitary Commission, of the Soldiers' Home at Cairo, for the brief entertainment of the poor fellows who arrive at that point from the army, and have no means of procuring food and lodging. Weak and ill

in body, discouraged and despondent in mind, strangers to the place and people, destitute of money, though often creditors of the Government, they need some roof to shelter them, and some friend to secure the papers necessary for their discharge or their journey home. At our request, the Government provided a building and the usual army rations, and we have placed there a Superintendent and an Assistant, to act as a guardian to the men in all the respects in which they need advice or aid. About fifty soldiers slept there, on an average, every night, though occasionally as many as one hundred and thirty have been accommodated. These have usually departed in the morning train with cheerful and grateful hearts. The entire number thus aided has been about *three thousand!*"

Is Tracheotomy in True Croup a Justifiable Operation. By John O'Reilly, M.D., Licentiate and Fellow of the Royal College of Surgeons in Ireland: Resident Fellow of the New York Academy of Medicine; Member of the Medico-Chirurgical College of New York. pp. 23.

Dr. O'Reilly entertains novel views of the causes of croup. He contends that it depends upon a specific poison as much as intermittent fever or small-pox, and should be treated by such remedies as will tend to neutralize the poison and eliminate it from the system, combined with tonics. His remedies are ipecac to unload the stomach and remove irritation; calomel to increase the secretion of bile, and clean out the intestines; quinine to strengthen the organic nervous system and neutralize and overpower the poison; and sulphate of potash to convert the albumen into mucus. The following are his views of tracheotomy and the use of chloroform:—

"I have further to protest against the operation of tracheotomy in true croup, on the following grounds:

"*Firstly.* That the operation cannot be productive of advantage, inasmuch as the air cannot be brought in contact with the sound part of the lungs in consequence of the diseased action of the organic glands, which have thrown out a false membrane in the trachea and bronchi, and a similar substance to the false membrane in the air-cells, which thus *throws* up a *blockade against the contact of the air with the pulmonary glands.*

"*Secondly.* That there is *primâ facie* evidence that the operation is useless, inasmuch as the patient dies *after the operation* at certain intervals, as before stated.

"*Thirdly.* That it is well established, that in cases suitable for the operation of tracheotomy, such as foreign bodies in the trachea, idiopathic or specific laryngitis, secondary croup, there is very little danger to be apprehended from the operation: it therefore follows that the great mortality attendant on the operation for true croup, must be the consequence of some other difficulty in addition to the impediment presented by the false membrane to the entrance of air into the lungs: the truth is, the patient dies from exhaustion of the organic nervous system and want of oxygen, when death takes place after the operation.

"It has been stated that some of the patients on whom the operation has been performed, have been put under the influence of chloroform, and that there was very little difficulty experienced in producing insensibility. Having protested against the operation of tracheotomy in true croup, I cannot find language sufficiently strong to protest against the administration of chloroform to a child suffering from true croup."

The Physician's Visiting List, Diary and Book of Engagements for 1863: Philadelphia. Lindsay & Blakiston.

This is a very convenient book for the practitioner, containing all the details which he may require in compact form.

The Half-Yearly Abstract of the Medical Sciences: Edited by W. H. Ranking, M.D., and C. B. Radcliffe, M.D., No. 35, January to July, 1862. Philadelphia: Lindsay & Blakiston.

Half-Yearly Retrospect of Practical Medicine, Surgery, and Obstetrics. By W. Braithwaite. New York: W. A. Townsend.

These semi-annual publications are filled with the gleanings of practical matter from the various medical journals. Every physician should subscribe to these works.

Correspondence.

HOSPITALS AT NASHVILLE, TENN.

[To the Editor of the American Medical Times.]

University Hospital, Nos. 2 and 3.
Nashville, Tenn., Aug. 6, 1862.

Sir:—I append a copy of the reports of the number of sick and wounded who have been under treatment during the past five months in the General Hospitals, Nos. 2 and 3, under the direction of Surgeon A. Henry Thurston, U. S. V. The report for March covers only the cases under treatment during the three weeks following the tenth of the month, as previous to that date everything was in a chaotic state of transition. Before the surrender of Nashville, the two large buildings of the University of Nashville were occupied by sick and wounded soldiers from the ranks of the Confederate Army. A large supply of hospital stores had also been accumulated on the premises. But during the panic which was occasioned by the capture of Fort Donelson, about the 20th of February, the number of patients which at one time had been not less than twelve hundred, was rapidly diminished, so that only the most wretched and helpless were left, to hail the coming of our surgeons. The medical stores were depleted in a similar manner, and the University Hospital presented an appearance in no way calculated to inspire its inmates with hopes of recovery. This was a condition of affairs which grew worse every day till about the 8th of March, when surgeon Thurston was placed in charge. He found seven hundred sick and wounded men, the majority of them from the ranks of Gen. Buell's army, shivering in the uncleaned wards and halls of the two buildings under his direction. Fuel, food, and medical attendance were first supplied. Cleanliness, order, and discipline speedily followed; and the number of patients for whom suitable accommodations could not be furnished, was diminished as rapidly as possible. In less than two weeks Dr. Thurston presided over a hospital which in every respect of situation, provision, and resources requisite for the successful treatment and comfort of patients, was unrivalled by any other military hospital in the Western Department.

The University Hospital is remarkably fortunate in its situation, since it occupies the building and grounds of the Academic Department of the Nashville University, upon a hill in the southern suburb of the city, about one mile and a half distant from the capitol. The two buildings which were formerly devoted to the barracks and recitation rooms of the students in the Military School, now offer accommodations for five hundred patients. There is also within the same inclosure a large house in which the professors formerly resided. To this were attached the cook-house, the dining hall, the washrooms, and the engine-house of the University. The operations of this establishment are continued without change, only it must be confessed that the apartments of the fugitive faculty are occupied by Dr. Thurston and his staff of assistant surgeons, while the dining hall is three times daily thronged with convalescent United States Volunteers, who fill the places once consecrated to the use of the Nashville cadets. A convenient house for the deposit of the dead has been erected, and various other improvements have been introduced, so that the institution is now quite complete. A fence surrounds the grounds, inclosing sixteen acres of grass-plot, affording to the convalescent patients an opportunity for exercise out of doors without exposure to the temptations and injurious influences which assail the invalid soldier who is compelled to seek the open air in the streets of a city.

Of the two buildings which are devoted to the accom-

modation of patients, one (Hospital No. 2) is a large two-story structure, well built of limestone, arranged in the form of a cross. The quondam recitation rooms and halls afford space for thirteen wards, all large, airy, and well lighted. Smaller rooms under the same roof have been fitted with conveniences for bathing, and for the use of the subordinate officers of the hospital. The edifice known as Hospital No. 3 is located about one hundred yards behind No. 2. It is a three-story brick building, with central halls, which longitudinally divide each floor, and give access to twenty-five small apartments that were used as lodging-room for the students. Each of these cells is entered through one doorway, is lighted by one window, and contains five beds. To prevent any stagnation of the air in these narrow wards, the doors have been removed from their hinges, so that every patient can take advantage of the fresh air which is continually circulating through the wide entries and central passage-ways, an arrangement which insures a degree of ventilation more complete than is possible in many hospitals whose plan is more complicated and pretentious. The privies are removed to a distance of one hundred yards from the building: a circumstance which in this mild climate seldom occasions any inconvenience to those patients who are able to leave their beds. The diet of the patients is excellent. There is an abundance of milk, beef, bread, rice, and vegetables, all of the very best quality. Beef-tea, soup, and ice are supplied without stint. Besides all this, the pockets of the patients are generally so well lined with the coin and the notes of the United States that, while the comforts of many are generally increased, it is impossible to obviate that tendency to repeated attacks of cholera morbus which is a feature so remarkably characteristic of the convalescence of our more juvenile warriors.

A glance at the accompanying table will indicate the diseases which most harass the soldiers in this vicinity. Wounds and injuries have been very rare in Nashville since its occupation by the northern troops. The siege of Fort Donelson consigned to the surgeons in charge of the various military hospitals in this city a number of interesting cases of gunshot injury, but since the 1st of April the surgical practice in this hospital has been very limited. Nor does the medical practice compensate for this deficiency by that variety which is found in those great metropolitan institutions where every age, sex, and condition seeks relief. It is the nature and frequent occurrence of the few diseases which are peculiar to a military life that render our hospital service interesting.

Acute diseases of the respiratory organs were very prevalent during the wet weather which followed the progress of our troops towards the battle-field of Shiloh; but since the 1st of May it is not often that a patient complains of any recent thoracic affection. The alimentary canal of the north-western soldier is the route through which the citadel of his health is most easily assailed. The acute forms of diarrhœa and dysentery do not vary from those with which you are familiar, but the chronic cases are very intractable. Dr. Tripler, in his little Hand-book of Military Surgery, has drawn a very accurate picture of the progress, conclusion, and post-mortem appearances characteristic of camp dysentery; and the mode of treatment which he has recommended is the only one which has thus far seemed to promise any great degree of success in the attempt to combat the ravages of this disease. As for the forms of fever which come under our notice, it is undoubtedly true that typhoid fever was of frequent occurrence during the spring months; this is proved by post-mortem inspection of patients who have succumbed to the disease; but if all the cases of fever attended with rose-colored spots upon the skin, diarrhœa, etc., etc., are to be reported as cases of typhoid, we must conclude that the disease is modified in many particulars by its intimate relation with the causes of the remittent form which has thus far marked at least nine-tenths of the cases of fever which, during the last three months, have been placed under my observation. Intermittent fever is usually treated in the camp, and is therefore seldom found in the general hospitals. Of the congestive, or pernicious form, I have seen but one well marked case. This was a private from the 13th Michigan regiment, Francis M. Howe, aged twenty-eight, a native of Southern Michigan, who had always enjoyed excellent health till his arrival at Nashville, during the month of March, 1862. He was soon attacked with a fever, said to have been typhoid, and remained in one of the hospitals till the middle of May, when he was dismissed to the camp for convalescents, in the suburbs of the city; but complaining continually of *rheumatism* and *debility*, he was sent to the University Hospital, where he was placed under treatment, June 26th, 1862. He then presented the appearance of a sunburned, muscular, well nourished man, an appearance which he never lost. The only visible sign of disease was an unusual paleness of the tongue and of the palpebral conjunctivæ. For this, he was ordered quinine and iron; but at eleven o'clock, July 1st, he experienced a slight chill, followed by fever which continued for an hour. A scruple of quinine, taken in divided doses during the following day, suppressed the disease till July 11th, when another chill with subsequent fever occurred. The use of quinine, six grains each day, had been continued during this interval. Another scruple was administered the next day, and the patient experienced no further renewal of the chills and febrile movement, but July 17th he found himself oppressed by uneasy sensations, *rheumatic pains* he called them, and his skin was covered with fœtid perspiration which continued through the day and night. He took a scruple of Dover's powder during the day, and twenty grains of quinine next morning. After this he was remarkably well till July 24th. The peculiar perspiration was renewed during the previous night, and continued the greater part of the day. Was ordered ten grains of Dover's powder every four hours till the cessation of the fetor. July 25th was ordered four compound cathartic pills, to be followed by a scruple of quinine; but whether the quinine was ever taken is uncertain, because of a prejudice which the patient entertained against the use of the antiperiodic. He, however, declared himself perfectly well till Sunday morning, July 27th. During the preceding night he had experienced a painless diarrhœa, which had occasioned three or four fluid stools. His appetite seemed unimpaired. He complained of pains in his limbs, and of a singular, burning sensation in his stomach, such as he had never before experienced: an insatiable thirst which water would not quench. He walked about the wards conversing with his companions till the time of the morning visit. His appearance was then in no respect unusual, but he was ordered to take a scruple of quinine in solution, an order which was never obeyed. At half past nine o'clock the patient laid himself down upon his bed, and was soon seen to move his feet, and to jerk his arms and head backwards. At the same moment his respiration became stertorous, and froth appeared upon the lips. The whole cutaneous surface rapidly grew purple and moist, but not cold: in less than two minutes he was dead.

Sectio Cadaveris.—July 27th, 3 o'clock P.M., five hours after death. Rigor mortis had not supervened; the whole body was warm, and the skin was yet moist. The livid color had disappeared, excepting from the lips and nose, and from the depending portions of the body. The frame was compact, muscular, and well clothed with adipose tissue.

Cranium.—The arachnoid was raised by a considerable serous effusion. At the base of the brain were not less than four ounces of fluid. There was no unusual congestion of the pia mater, or of the substance of the brain, nor was the amount of fluid in the ventricles perceptibly increased. The grey matter was very little, if at all darker than usual; the lower surface of the middle lobes was much softened.

Thorax.—The lungs were perfectly healthy: the pleural investment of the right lung was bound by old adhesions to the costal pleura. Very little fluid in the left pleural cavity. The heart was healthy: its left ventricle was

firmly contracted and empty; the right ventricle contained a small white clot; the right auricle was immensely distended with black, fluid blood. The pericardium contained about five ounces of clear, serous fluid.

Abdomen.—The intestines were uninflated: their only contents were a thin, pasty, straw-colored fluid, very scanty in amount. The external surface of the duodenum and jejunum presented a beautiful pinkish hue: the ileum and the colon were more darkly congested. The mucous membrane of the entire alimentary canal presented no sign of pre-existent disease, unless the solitary glands of the cœcum were larger and more conspicuous than is usual; several of them were near the size of a mustard seed. The spleen was not enlarged: it was of a slate-color, and its substance was as firm as that of the liver. The kidneys appeared to be healthy. There was no accumulation of fluid within the peritoneal cavity. The liver was full of blood, black, and fluent. Its color was a dark chocolate tint. The gall bladder was filled with liquid, yellowish-green bile. The blood was uncoagulated in the veins of the arm, as well as throughout the viscera.

This is the first case of congestive fever that has proved fatal under my observation. The sickly season is, however, at hand, and we may have further opportunities to study the disease.

Yours, &c.,

HENRY M. LYMAN, M.D.

REPORT OF SICK AT GENERAL HOSPITALS FOR THE QUARTER ENDING JUNE 30TH.—Congestive fever, 10; common continued fever, 31, died, 6; intermittent fever, 31, died, 1; remittent fever, 75, died, 5; typhoid fever, 42, died, 29; typhus fever, 13, died, 4; erysipelas, 7; rubeola, 1, died, 1; diarrhœa, acute, 152; chronic, 22, died, 10; dysentery, acute, 16, died, 1; chronic, 4; gastritis, 4; hepatitis, 1; icterus, 19, died, 3; parotitis, 3; peritonitis, 1; splenitis, 1; tonsillitis, 3; bronchitis, 23; catarrh, 23; phthisis pulmonalis, 12, died, 8; pleuritis, 24; pneumonia, 33, died, 14; angina pectoris, 2; meningitis, 1, died, 1; neuralgia, 10; paralysis, 2; diabetes, 1; nephritis, 4; orchitis, 3; syphilis, primitive, 9; consecutive, 1, died, 1; anasarca, 3; lumbago, 4; rheumatism, acute, 29; chronic, 9; abscess, 1.

FOREIGN CORRESPONDENCE.

LETTER IX.

BY PROF. CHARLES A. LEE.

PUBLIC HEALTH—WATER SUPPLY AND METHODS OF FILTRATION—DISEASED MEAT.

LONDON, July 12, 1862.

THIS imperial city now extends over 122 square miles, numbering nearly 3,000,000 of inhabitants, and represents the civilization of the age. It also offers unrivalled advantages for the study of mankind, under singular circumstances. Its average annual mortality is a fraction over twenty-two in a thousand, and the recorded observations of the last twenty-three years have thrown great light upon the prevalent causes of disease; indeed, it has been well observed that the results are as valuable as an experimental philosopher could have deduced from his experiments, if he had had the power to expose the population to great vicissitudes of heat and cold, of dampness and dryness; to the changes incidental to differences in the prices of food; to air and water of different degrees of impurity; and to destructive epidemics. No fact is better established than that excessive heat and cold injure health, and increase the mortality, the first, by occasioning bowel complaints, the latter, diseases of the respiratory organs—the effect being much the greatest in infancy and old age, and varying with age at rates regulated by laws.

Water, as it forms the greatest portion of the human body, has been well called the life-blood of cities, and the lowest mortality range is only compatible with a high degree of purity of this element.

The water used for drink by the inhabitants of this city is derived from shallow wells, deep wells, New River, the river Thames, and its tributaries. The well water is very impure, and has a large amount of organic matter in solution derived from cess-pools. The Thames is the great sewer of London and the country adjacent. In 1849, when 14,125 persons were swept away by cholera, it supplied the south and west districts of London with drinking-water, containing large amounts of organic matter, and it was found that the rates of mortality by that disease bore a direct ratio to the impurity of the water used by the inhabitants. No more important fact, perhaps, has ever been established by registration, than that the liability to attack from epidemic cholera is in proportion to the quantity of decaying organic matter contained in the water drunk. This was so fully proved by a committee appointed by the Board of Health, to inquire into the deaths in every house supplied by the different water companies, that it has never since been disputed, and yet the quantity of organic matter in the Southwark water, which proved so deleterious, was only two grains in a gallon in excess of that in the Lambeth water, so that 15 in 10,000 died of cholera who drank of water taken high up from the Thames, at Kew and Hammersmith; 48 in 10,000 in districts supplied by tributaries of the Thames; and 123 in the same number supplied with water taken from the foul part of the Thames, between Battersea and Waterloo Bridge. The tributaries of London have, in fine, proved beyond all doubt, that water containing minute quantities of organic matter, as river water receiving the sewage of towns, or surface wells in cities, into which impurities will find their way, must often contain the elements of zymotic diseases, and can never be drunk with entire impurity. In other words, it is a truism, that the purest water is the healthiest. Government, acting on this well established fact, directs twelvemonthly analyses, by a skilful chemist, of the waters of each of the six companies which supply London with water, to be published in the Weekly Tables, so that the public constantly know, or have the means of knowing, what kind of water they are drinking. It would not be amiss to have a similar regulation adopted in regard to our New York Croton water, which is often loaded, in hot weather in summer, with organic matter, in the shape of infusoria, which increase, as is well known, with miraculous rapidity. This may be easily remedied now, as we have three reservoirs, by causing the water to be entirely drawn off from each, at certain intervals, during the summer and autumn, the city being in the mean time supplied from the others. There is no doubt in my mind that this cause contributes to the high death ratio in New York, especially among children; for the reduction of the mortality in London coincides very accurately with the improvement in the water supply. It is well known that the sewage of this city is, in general, very perfect, and no city in the world, so far as I know, is always kept in a cleaner condition. Hence it is not illogical to attribute the diminished mortality (22.49 in 1000 living in London, in 1860) to the improved water supply.

And this brings me to a subject which has been suggested by a late visit to the International Exhibition, viz. the various methods of filtration and other modes of purifying water there displayed. More than one hundred different patents have been taken out in England for the purification of water, and we often see beautiful fountains of curious devices fitted up in shop windows, where such apparatus is kept for sale. So far as I have been able to investigate the matter, *carbon*, in some form, is the agent generally employed, although there is scarcely a porous or tasteless substance in nature but what is put in requisition for this purpose. When charcoal is employed it is usually made solid by compression, as the finer the pores the more perfect the filtration, as is supposed. But there is always this difficulty, that the pores in a hard mass must unavoidably become more or less clogged in a short time, and there is no way of cleansing them. This objection must always,

as it seems to me, apply to filters made of consolidated charcoal; granules of animal charcoal, it is well known, offer an equally effectual resistance to impurities, and filters composed of it can be readily cleaned by simple rinsing. Still, filters made of solid masses of silicated charcoal, silex being employed to give shape and consistence, are now very popular in London, and are in constant use in the royal household, and most houses of the nobility and gentry. The silex usually employed is a refuse of gas-works; formerly some bituminous compounds were used to bind the carboniferous particles together—many prefer filters made of loose particles of charcoal, in grains about the size of gunpowder, regarding silex, pitch, or any other substance to bind the particles together as having no advantage whatever, and being simply an adulteration. Such are Danchell's filters, while Messrs. Dahlhe, Atkins, and others are the solid blocks. A popular error in regard to water needs correction, and that is, that water containing deleterious matter must necessarily be foul in appearance; whereas some of the wells in London, which yield apparently the clearest, brightest, and most translucent water I ever saw, are absolutely so loaded with organic matter as to be poisonous, and no filtration will correct the evil. Whatever the impregnations may be, they are not removed by carbon filters; nor will any of these one hundred filters remove any of the salts of lime held in solution—not even the phosphates of the graveyards and cemeteries. It is well that we have such infallible chemical tests for these and other mineral salts and substances.

One highly original plan of filtration by Mr. Spencer deserves special notice, and that is, the *magnetic* system of purifying water, which has now been adopted in the public supply of several large towns. This is the same gentleman who discovered electro-metallurgy, and I believe that he confidently claims for his system, that it will separate all mineral and organic matters whatever from water. That it may readily separate all ferruginous matters I can readily understand; but on what principle it removes salts of lime, or other minerals, is not very easy to comprehend.

In my visits to the various markets in London, and especially to those narrow, dark streets, where meat is sold to the poorest classes, I have been greatly surprised to see the great quantities of diseased meat allowed to be sold. I have seen, within sound of Bow Bells, more diseased meat offered for sale during the last two months, than I ever saw in New York during my whole life. Indeed, such samples of flesh meat, I venture to say, could hardly be found beyond the precincts of this city; and that notwithstanding there are plenty of Health Officers and Inspectors. Generally it sells as low as a penny per pound, and it is fearful to think what quantities of it must be consumed by the poorer classes. It is especially patronized by the sausage-makers, soup shops, and beef and meat pie shops. Such meat is sent here from all parts of the country, even from a distance of 150 miles, or more; and some Insurance offices exist in London, who insure cattle and sheep on condition that if the animals die from diseases, they shall belong to the Company, "the party insuring receiving two-thirds the value of the animal, and one-third the salvage; or, in other words, one-third of the amount the beast is sold for when dead." And those Insurance offices have their own slaughter-houses, where such animals are killed and dressed. Nearly 5000 lbs. of such meat have been recently seized in this city in one week, and yet the trade flourishes. It has been ascertained also that a considerable portion of this diseased meat comes from urban cow-houses—a pest quite as common here as in New York. The contagious pleuro-pneumonia, which has recently proved so fatal to cattle in New England, has prevailed extensively in England of late years, and is the most fatal of all diseases affecting ruminant animals. It has recently been shown, that within the last few years this disease has prevailed more or less in every dairy in the city, and that probably *in all cases*, cows sick or dying of it, have been sold to the butchers. This contagious lung disease has extended to most of the grazing districts of the island, affecting sheep as well as cattle; and as soon as an animal gives any signs of an attack, it is slaughtered and sent to London, or some of the great towns. The disease, however, is said, by veterinary practitioners, to be more ripe among London dairy stock than elsewhere, owing to the over-crowded, ill-ventilated, and filthy cow-sheds. The obvious remedy for this evil is, the abolition of private slaughter-houses, and the erection of public *abattoirs*, as in Paris. No animal should be allowed to be privately killed and dressed; and this should be extended to the whole kingdom. The great multiplication of private slaughter-houses in New York furnishes extensive facilities for the sale of diseased meat; and the immense number of cows kept in close stables, and fed on distillery slops, furnish strong temptations to their owners to make their carcasses profitable, as well as their milk, even when dying of disease. Perhaps closer investigation in regard to this matter may lead to the discovery of evils whose existence is hardly suspected. However this may be, there must exist some powerful special causes of sickness and death, of far wider scope and greater intensity than are found in London, to account for the much higher death rate than prevails here, or in any of the large cities of Great Britain, or even of Europe.

Medical News.

Chromhidrose.—Several medical men, as our readers may remember, have given in their belief in the existence of a malady called cromhidrose. M. Behier, in the name of a commission appointed to investigate the case of the female at Brest presented by M. de Mericourt as a subject of the affection, has sent in a report. This report points out the way in which medical and other believers have been deceived. The black coloring matter used by the feminine adepts appears to have been chiefly of a sooty kind. When the coloring matter was removed from the eyelids, the discoloration was reproduced by vigorous wiuking. It never returned *suâ sponte*. A supply of the coloring matter was found at the base of the eyelashes, agglutinated around the hairs. By the use of the kohenit—a dark cosmetic applied to the eyelashes—and by winking, the chromhidrose was produced in a few minutes. M. Robin, on analysis of the dark matter, stated that it was a substance *sui generis*, and of the nature of the coloring matter of the choroid, and was mixed up with fatty matter and cells. But this *sui generis* matter turns out to be the epidermic cells, and removed with the coloring matter when scratched off the eyelids. M. Gubler of Liegc has put a finishing stroke to the business, by showing that, in one young lady suffering under chromhidrosis, the coloring matter was found spread over the *external* surface of a layer of collodion laid upon the eyelids!—*Brit. Jour.*

Dr. Sloan and our Sick and Wounded Men.—All the military hospitals in this city, including the Ladies' Hospital—the City Hospital—Bellevue Hospital—St. Luke's Hospital—the Jews' Hospital—the two hospitals in Brooklyn, and the hospitals on David's Island, Bedloe's Island, Blackwell's Island, and Governor's Island—containing nearly five thousand sick and wounded soldiers, are under the charge of Dr. Sloan, the Medical Director, whose appointment reflects great credit on the foresight and sagacity of Surgeon-General Hammond. Dr. Sloan has been a surgeon in the army for the last quarter of a century, and his professional skill, and great executive ability, have won for him the confidence of the community and the Government. Dr. Sloan is a gentleman of culture and experience, and he has been at work noiselessly, bringing order out of chaos, and reducing to perfect system the business in his hands.—*Paper.*

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.
SESSION 1860-61.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Lecture XII.—Part II.

Why Essential, or Dental, Paralysis is considered a Spinal Disease.— Why Dental Paralysis is not always a Spinal Disease.

The reasons why Dr. Heine feels justified in considering infantile paralysis as spinal, are derived from the real or supposed peculiarities of such cases in their last stage. They are, in his own words, the following:

1. The cerebral functions of the patients are entirely intact. No case of his exhibited any disturbance in either mental or sensory actions. Wherever there were any cerebral symptoms in the beginning, they disappeared rapidly.

2. Paralysis followed immediately the symptoms of a general and central disease, as fever, convulsions, congestion. Paralysis from peripheric causes shows frequently the reverse, as there is an interval between the first attack and the last stage, viz. that of paralysis.

In the commencement of essential paralysis, contraction is never observed; the limbs are perfectly paralytic, and paralysis takes place in all the affected parts at the very same time: it has, in the first period, a tendency to gradual decrease, but never to progress. Both arms are not affected at the same time, nor are arm and leg of the same side; but always either both legs, or one arm, or one leg. Affection of the trunk is not unfrequent; it produces paralytic scoliosis: in such cases the motory nerves of the lumbar and sacral plexuses of the corresponding side, together with other spinal nerves, are suffering. Where but a single arm is paralysed (a rare case indeed) the affection has its seat in the brachial plexus of the corresponding side; in most of these cases all the muscles are affected. Cases of transverse paralysis are very rare occurrences. The sensory organs are hardly affected, except in the very commencement, and then, too, but slightly. There is no pain in the secondary period.

3. Frequently it is met with in, and limited to, the two lower extremities. Hemiplegia, paralysis of but one side or extremity, is frequently the last remainder of paraplegia.

4. It is very intense. In many cases the muscles of the trunk are also paralysed; this affection may generally diminish, but the spinal character of the paralysis will be shown by the characteristic scoliotic curvature, and sometimes by the enormous deformity of the whole trunk, which differ considerably from other cases of scoliosis, and exhibit a decidedly paralytic character.

5. In this paralysis, the atrophy of the affected limb is considerable, its temperature decreases fast and very much indeed. These symptoms are not so decided in motory paralysis depending on diseases of the brain; and moreover, Prof. Budge has proved by direct physiological experiments made on the spine of rabbits, which he cut for this purpose, the influence of the spine on the temperature of the body. The decrease of temperature is more pronounced in the periphery than near the centre; it has been observed to be as low as sixty-three and a half degrees. Motory power, nervous influence, and circulation are considerably diminished, and therefore the lower temperature is readily explained. Arteries and veins have been found smaller than normal; to such a degree, even, this diminution of size and lumen may proceed, that Hutin has a case in which a number of smaller bloodvessels had entirely disappeared. The diagnosis from wasting palsy (*atrophie musculaire progressive*, Cruveilhier) is established by the fact, that in wasting palsy the atrophy is the primary suffering of which paralysis is the natural consequence; whereas, in essential paralysis the atrophy is secondary, and brought on by the diminution of both nervous influence and circulation of the blood.

6. In paralysis of an arm, which sometimes would set in with the same symptoms as those described above, the post-mortem examination has proved a material alteration of that portion of the spine from which the brachial plexus takes its origin.

7. There is a total want of galvanic reaction and electrical contractility in the paralysed muscles, in infantile paralysis. The experiments of Duchenne and others yield a negative result in spinal paralysis, while in cerebral paralysis the sensibility is always intact, and sometimes even increased to painfulness. Nor does peripheric paralysis participate in this peculiarity of the spinal form. These differences have often been used for obtaining a correct diagnosis of the local cause of the disease.

8. All the authors agree in the assumption of the spine being affected in most paraplegias, in which standing erect, and walking, is rendered impossible. While now, paraplegia must be supposed to depend on a general and thorough bilateral affection of the spine or its membranes; our cases of essential paralysis give rise to the assumption of a more local, or universal alteration.

9. Essential paralysis is incurable; peripheric paralysis is not so.

10. Finally, the aspect of such patients, and the drawings taken from them, give the impression of a deep-seated disease of the nervous centres, perhaps even the spine.

Such are, in the opinion of our author, the leading pathognomonic qualities of dental, essential, or "spinal infantile" paralysis. I am, however, so far from assuming them to be indisputably correct, that I think it necessary to answer several questions, of which one is this: whether essential paralysis is really a disease of the dental period, and another, whether indeed it is always the result of a disease of the spine.

We have been taught, and experience proves, that the first onset of the disease resulting in essential paralysis, may show great differences both in its symptoms, and in its course. Sometimes the final result is produced unexpectedly fast; sometimes, however, the predisposing cause requires some time to bring on the necessary alterations. For certainly, we require of necessity, permanent local alterations to explain permanent paralysis. The principal symptoms of the first attack which I have mentioned before, belong either to the brain, or the spine, or the nerves, and, from this fact, contrary to the assertions of the author, we should feel obliged to conclude that the subsequent paralysis would be either of a cerebral, or spinal, or peripheric character. For the simplest facts of the pathology of the nervous system show, that like convulsions, paralysis may have its primary seat either in one of the nervous centres, or in the course, or in the periphery of a nerve. If paralysis with the same symptoms as the dental or essential form, participates in the general characters of paralysis, if further the symptoms of the first attaek are either cerebral, or spinal, or peripheric, are we justified in assuming the spine to be the only seat and cause of the consecutive paralysis? At all events, the dictatorial words of the author, that "cerebral symptoms may be present in the beginning, but are not connected with the paralysis, and *must not* be brought into any etiological relation to essential paralysis," appear too little based on the generally known facts of physiology. It is not true, indeed, that in cases where paralysis is ushered in with symptoms of cerebral irritation, while these symptoms disappear afterwards and leave the menta

facultics intact for the future, the brain is not affected. Those cases of paralysis in which this very paralysis was the prominent, or rather only symptom during life, and the post-mortem examination revealed some of the traces of recent or old apoplexy in the cerebral substance, as for instance, encysted remnants on the dura mater, in both adults and children, ought to be satisfactory proofs to the contrary. At all events, I am a little slow in believing in the actual correctness of the remark of our author, that the premonitory cerebral symptoms are usually slight, but that in very violent attacks life may be endangered, although fatal termination without complications has not been observed *by him*. I have no doubt that this last addition is correct. For institutions like his, receive their patients after the disease has been allowed to remain a shorter or longer period, when the narratives of the relations are the only guides of the specialist; and indeed, such patients as are brought into an institution for the performance of tenotomy, and the application of extending apparatus, etc., do not belong to the number of those who died in the first attack. If the doctor meant to say that, it was a superfluous undertaking.

You have heard that but few post-mortem examinations of old cases of essential paralysis are on record. In some, local alterations inside the vertebral column have been found, in others not. Dr. von Heine takes those in which the results of extravasations or exudations were visible, as spinal. Good. Those in which nothing has been found, however, he also considers as spinal, because either microscopical examinations (which have not been made or have given no result) *might* have afforded a proof, or because there are cases in which paralysis is not explained by any pathological changes. The latter he takes as spinal; thus for instance a case of Longet's in which the examination resulted in finding no spinal disease, but atrophy of the roots of some nerves. Nor is he less bashful in explaining away pathological results. Thus a case of Behrend's in which both brain and spine are described as diseased, is also crowded into the spinal flock of paralyses.

You see after all, that not in every case of dental or essential paralysis a diagnosis can be made, inasmuch as the differential diagnosis of the first insults could not be, or was only made during, or from the former periods of the disease. But always be sure to bring into account not only the spine, but be aware that diseases of all the nervous centres and motory nerves may be the causes of paralysis; on the only condition that they give rise to alterations essentially injuring the action of the nerves. It is true, further, that many diseases are more frequent in a certain age; and that the symptoms, in spite of the same locality and character, may differ according to age and individuality; but this certainly ought not to influence and prejudice us so far as to multiply our classifications and varieties. For prejudice when once allowed to prevail in pathology, will lead to further extravagances. Thus Dr. von Heine means to simply exclude the cases commencing with cerebral symptoms, terminating in paralysis, and finally recovery, from the number of the dental, or spinal infantile paralysis—because of their recovery; while incurability is taken by the author as one of the prominent proofs of the essential "spinal infantile" paralysis. Who ever made his diagnoses from the results of treatment? and who ever, except our celebrated author, would at the same time deny the occurrence of rheumatic paralysis, and declare those favorable cases to be rheumatic? If further, spinal infantile paralysis depending on extravasation or exudation inside the vertebral canal is as incurable as he makes out, why is it that he still recommends the internal administration of absorbents? Have his 150 cases proved the incurability so thoroughly, or have they informed him, as many of my own have me, of the possibility of removing exudations or extravasations from the vertebral canal with the same ease, or rather difficulty, as in other not very accessible localities?

Several other remarks and assertions of the author's are not more justified by facts. Thus it is not true, that the paralysis in the dental, or essential form, is more complete than in other kinds. The condition of the joint of the humerus, with its easy luxation and reposition, and the peculiar flabbiness of the muscles of the arm, are not at all characteristics of this disease. It is even observed in paralytic adults, with this exception, that both muscles and ligaments are more flaccid and stretch more easily in children than in adults. Nor is the absence of primary contraction in essential paralysis based on facts; the author himself does not believe in his own assertion as he mentions the paralytic form of scoliosis as depending on the asymmetrical contraction of the dorsal muscles. The real facts of the case are these, that the kind of paralysis of which I have spoken is seldom complete, but differs in the manner in which single muscles are affected. The equal power of antagonists is suspended; thus contraction is brought on by attempts at locomotion, and exercise in general as mentioned above. But this is not the only cause of contraction. For it is well known, especially in cerebral diseases, that the presence of a certain amount of extravasation, or effusion, gives rise to the symptoms of irritation, while a slight increase in the amount leads to depression and paralysis. We have no reason to believe this to be different in the spine. This early contraction depends on the presence of irritation, on the proportionate mildness or severity of the case, whether cerebral or spinal or peripheric, but not on the seat of the affection.

Nor is the seat of the affection so infallibly announced by the galvanic irritability of the muscles. For there are now a number of cases on record in which its absence in spinal diseases, and its intact condition in cerebral affections, were by no means constant and incontestable. Nor is the decrease of temperature greater in essential paralysis than in other forms; not the seat of the disease, but duration, the age at its first appearance, the atrophy, the nature and number of the affected (motory, sensitive, or vasomotory) nerves, and all the other causes of animal heat must be taken in regard, and may act just as thoroughly in cerebral as in spinal paralysis. And the atrophy itself, which has been said to show itself more rapidly in essential paralysis, depends not on the form or seat of the disease, but again on some of the above-mentioned factors; on the rapidity of changes taking place in the infantile organism, in which infantile paralysis is mostly observed, and on the prevalence of fat at this age, which disappears more rapidly than any other tissue.

Finally, the assertion of Dr. von Heine, that the majority of cases of essential paralysis does not only occur in healthy and robust children, but that their very health and the amount of blood circulating in their organism predisposes them to extravasation and effusion in the vertebral canal, is, to say the least, somewhat unphysiological. The amount of blood contained in the system can be superabundant for a short time only; export and elimination increase in proportion to import and assimilation. If this is true in the adult, it is still more so in the child. On the other hand, it is a common observation that extravasation and effusion will mostly take place in anæmic individuals. It is true that scrofula, rhachitis, and other so-called dyscrasic processes, cannot be made responsible for the occurrence of essential paralysis, but still less, both from theoretical reasons, and the results of my experience, I feel inclined to accuse health, and a robust and vigorous constitution.

Adulteration of Milk.—It is stated that borax is employed to prevent milk from turning sour, and also to impart more consistence, so as to appear more creamlike.—*Chicago Med. Journal.*

Dr. Lautner-Bey has brought twelve young men from Egypt to Munich, to study medicine there under his superintendence.

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from page* 101.)

I HAVE very little to say of the prognosis of this disease. My conviction of its almost utter hopelessness, after the period when it is usually recoguised, will be inferred from what has been already stated.

In confirmation of the statement that I have made, and in further contrast of the two forms of the disease that seem to be characteristic in this affection, I will give an incomplete generalization of the cases that I have written up here, stating, however, that they are not complete. In justice to myself I may be allowed to explain how and why they are not complete. The microscopical appearances are recorded in this book with sufficient order and detail, for these I have no disposition to apologize; but the ante-mortem histories were on sheets and filed. These have been mislaid or lost, and I have nothing to replace them in several cases; in some a short synopsis, and in a few the full report has been copied into the book for microscopical records.

In the thirty cases the *size* of the kidney was given in twenty-nine; it would have been given in all, but one of the cases was studied from a fragment sent by the late Dr. Swett. In these twenty-nine the kidney was contracted or small in only four. It was large and often white in sixteen; it was of normal size, hardly larger or smaller than in health, in nine.

The *ages* in the four cases of small kidney are given in three only; these were thirty, forty, and fifty-four years, making an average of forty-one. The age of the sixteen having large kidneys is given in nine cases; the oldest of these was forty-seven, the youngest sixteen; between the ages of twenty and thirty was one; thirty and forty, four; and forty and forty-seven, three. The average age for the large kidney was thirty-five years. It thus appears that the average age for the small kidney is higher than that for the large, a fact which will be more clearly shown hereafter. The ages of the persons whose kidneys were of normal size are recorded in eight cases. The oldest was sixty-nine, the youngest nineteen. Between twenty and thirty, there were three; between thirty and forty, two; at sixty-five, one; at sixty-nine, one. The average age was thirty-six. The average age of all in the three classes was thirty-six years and six months.

Inquiry regarding the *sex* of those suffering from Bright's kidney, shows that males are very much more liable to it than females. Thus, while in my cases the sexes share equally the four small kidneys (the number being much too small to serve as the foundation of a rule)—in twenty-four cases, seven only were females, the males counting seventeen. Of those having large kidneys, eight were males and three females; and of those whose kidneys were of normal size, there were seven males to two females.

Œdema was noted in these cases, sometimes slight, and in several occurring only a few days before death, often confined to the feet and ankles, in sixteen; it is stated not to have existed at all in five; it is not mentioned and probably did not exist in two more; histories lost, seven. Thus, then, in twenty-three of these cases, the histories being sufficiently complete, sixteen had œdema, and seven probably did not, five certainly did not have it. Of those who had large kidney, sixteen in number, œdema occurred in ten; did not occur in two, the kidneys in these two weighing six ounces and seven ounces, or but little enlarged; no histories preserved in four. In those who had the small kidney, four in number, while ascites is reported in three, œdema is not noticed in any, and probably did not occur except in the lungs. Here again the contrast is sufficiently marked between the large and the small kidney. We have just observed, that the age of the small kidney is at an average considerably greater than that of the large, and here we remark that œdema occurs more frequently, and is more extensive with the large than with the small kidney. With the kidneys, uormal in size, nine in number, œdema was found in six, did not occur in two; no history in one.

The urine is described as smoky in three out of the twenty-three of which there is a tolerably fair history. In each of these the kidney was above the natural size; in two it is described as congested, in the remaining one it is stated that the vessels were full. The urine in each instance was albuminous.

The urine was examined for albumen in sixteen of these cases. Albumen was found in thirteen, it was not found in three; no examination in four; not mentioned in four; and no history of the cases in six.

Among twenty-three cases in which the urine is spoken of at all, it is reported as having been scanty in eight; as highly colored in four; scalding (albuminous) in one; and passed often (also albuminous) in one. The scanty urine was albuminous in four; not albuminous in two; albumen not mentioned in two. The high-colored urine was albuminous in two; not albuminous in one; albumen not mentioned in one.

The three persons whose urine was not albuminous had kidneys, one weighing eight and a half ounces, one two and three quarter ounces, the other was of normal size weighing four and a half ounces; so that the absence of albumen when carefully sought for divides itself evenly among the three classes, one large kidney, one small, and one of normal size. Albumen was not found in two of the four whose kidneys were small, and no mention is made of it in the other two. As a matter of fact in recalling a much larger number of cases than are here recorded, and by reference to the cases reported by Wilks and Bright, it is apparent that albumen is commonly absent in those having the small kidney, and generally present with the large kidney. It is found to be variable in those whose kidneys are of normal size.

Certain facts in relation to the connexion of this disease with others discovered at post-mortem examinations or during life have not yet been mentioned. The relation of cirrhosis to Bright's disease is not uninteresting. The cases here recorded enable me to say this much and no more: cirrhosis, or fibrous contraction of the liver, with or without irregular surface, occurred in five out of the thirty cases; two of these belonged to the four small kidneys, and in these two, the kidneys weighing three, and two and three quarter ounces, the liver was more markedly bobnail. In one the kidney was of normal size; and in the other two its weight was five and three quarter ounces, and seven ounces. Fatty liver occurred in four persons in this number of thirty, and in each of these the kidney was of normal size, and in all but one contained an unusual amount of oily matter. In other words, all the kidneys except one were fatty in these four persons, showing a correspondence in the two organs in the nature of the changes that take place in them. This correspondence will not be confirmed by a reference to Bright's observations, but the facts are correctly reported, and are, it strikes me, of some importance.

The fatty condition in these four kidneys was thus:—cells not fatty, but intertubular tissue loaded with oil globules, in one; three-fourths of the cells fatty and some intertubular deposit in one; spots of fatty deposit in the kidney and similar spots in the liver, differing only in size, in one; cells a little fatty but much more granular in one. These circumscribed patches of fatty degeneration in the liver, and spots of fatty degeneration in the kidney, both substantially of the same character, are especially noticeable as showing the tendency to correspondence of action in the two organs.

In one case there was waxy degeneration of the liver. The organ was of a brown color, and when a thin section was made from it, and was held by one border, it was so stiff that it would stand out almost without bending, like a similar section of wood. This waxy or scrofulous degeneration of the liver I naturally expected would be attended with waxy or scrofulous kidney. It was not so, however; there was not a waxy cell in the organ anywhere. The two kidneys weighed respectively eight and a half and nine and a half ounces, the epithelium had undergone granular degeneration, but as I have said there were no waxy cells. There is a figure that I made for my own studies of the cells found in this waxy liver. They are of a peculiar character, very unlike the natural cells of the liver, some of which are figured here. Here are the waxy cells; they have a color somewhat leaden, but they are shiny, and glistening. Some of them have a dot in the centre that seems as if it might be a nucleus. They seem to be compound, made up of different cells that coalesce. Here seems to be a group, a central cell surrounded by others, which seem either to have coalesced or to be breaking up by fissures. Here is what seem to be fragments of these cells. This, then, is the waxy matter which has been called cellulose, amyloid, etc., but it does not seem to me to have any marked resemblance to starch. I have seen these bodies, whatever they may be, in the kidneys and mesenteric glands, and in other parts of the body, but not in this particular instance. But here is a representation of what occurred in that woman's kidney. This view represents nearly a healthy condition of one of the tubes, seen as if cut open—for the microscope bisects for itself, its focus being at a certain level it gives a limited, and in this case a half view. Here, then, we get the thickness of the walls, and the nuclei, and see the blending of cells as they lie in apposition and line the basement membrane or outer layer of the tube. Something less than one-half the tubes of the cortical portion of these kidneys were in this condition, that is healthy, or nearly so, but the remainder were more or less granular, some extremely so. The gradations of this change are represented in these figures. Here is the appearance of the small tubes, the tubes of the tubular portion, and in this woman they had undergone nearly the same alterations; some were healthy, but the granular disintegration of the epithelium was the marked feature. The contrast is very striking when these two diagrams are placed side by side—one represents the healthy state, the other that condition in which the cells have undergone completc granular degeneration. Here the granular matter is rolled up in a club-shaped body and nearly fills the whole tube. In another tube the granular matter is collected in a sort of cylinder, and being too long to lie in the tube, is folded up in a zigzag form, as here represented. This was the singular state of the kidney in this woman who had waxy liver.

I have heard the statement as an opinion of some physicians, that tuberculous disease of the lungs and Bright's disease were incompatible. I have already alluded to this point incidentally, but will here add that tubercuIous disease of the lungs existed among these thirty cases in six instances: of these, the kidney was large in four, small in one, and normal in one.

I have collected all the causes of death in these cases as far as the records have been preserved, in confirmation of the statements already made, that is in twenty-two cases. Ten were by acute inflammations—pneumonia alone, four; pneumonia of one side and pleurisy on the other, one; pneumonia and bronchitis, one; peritonitis and pleurisy together in one; pericarditis and meningitis together in one: meningitis alone in one; and dysentery in one, making the ten cases. One died of puerperal metritis, having had chronic disease of the kidney at the time of delivery. Two died in uræmic stupor, poisoned by urea as any one would be by opium; two died in convulsions; two from the exhaustion that had been produced by vomiting; one died from the direct effect of alcohol (this of course is not to be classed among the special effects of uræmia); one died of œdema of the lungs. In that case, as in several others that have been observed before and since, it was interesting to notice the amount of œdema—when the lung was laid upon the table, and struck with the finger, it trembled like a jelly, and gave the sensation of fluctuation to the finger when percussed, so great was the amount of water which it contained. That is not the only case that I have seen in which the quantity of water was so great. This was the immediate effect of the disease of the kidney. Of phthisis only one died; and in one instance death occurred suddenly and unexpectedly. This makes the enumeration of the cases that I referred to. Of the deaths by acute inflammations, all but one occurred among those whose kidneys were large or of normal size. In that one the kidney was smaller than natural, but not greatly contracted. Of the two deaths by convulsions, one occurred with the kidneys of normal size, while in the other the organ weighed only two and three-quarter ounces. In this case the person died in the second convulsion, so violent was it. I suppose it is pretty well understood that small kidneys produce convulsions which are very apt to terminate fatally.

With reference to hypertrophy of the heart it occurred but three times in these cases. But it is worthy of special notice that the concurrence of chronic affections of the heart and renal disease is not so frequently met with in hospital as in private practice. I suppose nine-tenths of all such cases I have seen have been in private practice. Hospital cases are apt to be simple. Three, then, had heart disease of the kind usually recognised. Of these, one had hypertrophy and valvular disease, one hypertrophy and old pericarditis, and one hypertrophy simple. In two of these three the kidneys were large, and in one small.

Besides these, there were two instances of Quain's degeneration of the heart, and both were found with fatty liver. It is interesting to notice what was the condition of the kidneys in these two cases. In one there was much intertubular fat, that is to say, oil; the intertubular tissue was loaded with oil. The other was the instance of spots of fatty degeneration of the kidneys and liver already referred to. So here the correspondence of fatty degeneration of the heart, liver, and kidney, is parallel in every point.

There are two or three topics that still remain to be considered, which I shall be compelled to defer till another evening.

The Academy then, on motion, adjourned.

BATTLE OF FAIR OAKS.

By FRANK H. HAMILTON, M.D.

MEDICAL DIRECTOR OF THE 4TH CORPS, ARMY OF THE POTOMAC.

The night of the 30th of May was remarkable for one of the most violent and long continued thunder storms I have ever witnessed; commencing before sunset, it continued unabated until after midnight. During which time the rain fell in torrents, and the flashes of lightning, followed by near and heavy bursts of thunder, were almost incessant. In vain we strove to turn the drifting streams from our tents; and long before morning officers and men had resigned themselves, cold, wet, and helpless, to the storm. At length the day broke upon a camp inundated in water. The few hill-sides were washed clean—the marshes, which abound in this region, were flooded—the rivulets greatly increased in size—the roads rendered nearly impassable, and, a circumstance from which we had most to apprehend, the Chickahominy, in our rear, had become swollen beyond its banks. From a sluggish stream trailing through cane-brakes and sedgy swamps, it had been suddenly converted into a broad and swift torrent, endangering our recently constructed bridges, and exposing us to the imminent hazard of being cut off from the whole centre and right wing of our army, no portion of which had yet crossed the river.

The sun shone clear and bright over the swamps and forests in which the corps of Keyes and Heintzelman were bivouacked—and the troops, accustomed to hardships, came cheerfully to bail out their rifle-pits and trenches; but those in responsible commands, who readily comprehended the nature of their new perils, looked thoughtful and anxious.

We were standing in front of our tents when a file of soldiers reported to the General a prisoner, just captured within our lines on the right. The prisoner was J. B. Washington, aide-de-camp to General Johnson. While General Keyes was conversing with him, two shells passed over us, proceeding apparently from the enemy's lines on the left. Young Washington looked around and towards his own lines in a manner indicating restlessness, and perhaps expectation of immediate succor. The guard was instructed to conduct him to General McClellan, and soon after General Keyes, having sent by an orderly a written communication to Headquarters, mounted his horse, and accompanied by his staff rode to the front. This was about 11 o'clock A.M.

We first visited the right of the line near Fair Oaks station, and while the General was disposing the troops I rode to the encampment of the 61st Pa. Vols., to inquire of Dr. Tindle, its very intelligent surgeon, whether a house situated still further to the right and occupied by our pickets, could be used as a hospital.

While conversing with him, a pretty heavy musketry firing was heard on the left, not far distant, and a single cannon shot passed over us

Spurring our horses along the "Nine Mile Road" in the direction of the firing, at the crossing called Seven Pines we came in sight of the enemy, now occupying the margin of a wood a few hundred yards in front of us. Our troops were replying vigorously and holding their position steadily. At this point I drew up my horse, while the General went forward. My mounted orderly had disappeared, and I never saw him again.

Riding to our encampment, about twenty rods to the right, to order forward the ambulances, I found ambulances and drivers with my servant, gone.

I had already determined to send my sick and wounded to Savage's Station, about one mile to the rear, and resuming my position at the Cross Roads, or Seven Pines, I awaited the return of the ambulances, for which a messenger was immediately dispatched.

The firing now extended across the whole front, and stragglers from broken regiments began to file past me. I am happy, however, to add my testimony to the testimony of others, that the number was small, and most of those who came from the front had the look peculiar to soldiers who have just been engaged in a severe contest. They seemed exhausted, walking slowly back, trailing their guns or without guns. Their clothes were soiled and torn, and their faces blackened with powder, especially about the mouth. Many were wounded, some severely, others slightly. To these were added at first, not a few who were sick, and had occupied hospital tents and two or three small houses near the front. The only aid I could render them at this moment, was to direct them down the road to Savage's Station.

One hour and a half, or until about 2 P.M., I remained in the same spot, having meanwhile sent three messengers for the ambulances, but not one of the messengers had returned; the number of the wounded was momentarily increasing, and groups of soldiers bearing their severely wounded comrades upon litters were constantly passing. As yet the enemy had made no advance beyond the point of their first attack. Occasionally a bullet aimed too high whistled over my head, and one struck the ground and threw the mud against my horse with such force as to lead me to suppose for the moment that he was hit.

Provoked at the delay in forwarding the ambulances, I rode back to Savage's Station, near which they were found under the grateful shelter of a hill, and entirely concealed from the sight and shot of the enemy.

With as much speed as they had sought the shelter of the hills I pushed them back to the first line of rifle pits, beyond which our steady but now decimated troops were still holding their ground. One two-wheeled ambulance was found in the road, the horse lying dead killed by a shell. Inside was stretched a soldier badly wounded in the thigh. He was transferred to one of our ambulances, and the driver directed to draw up on the side of the road and wait until his conveyance was full. As may be supposed, such orders are not always obeyed by ambulance drivers on the field of battle. In some instances, unless closely watched, the drivers start for the rear the moment one wounded man is taken on board. To this, however, it is but justice to say, there are many exceptions; and instances of bravery and faithfulness on the part of this class of men and boys, have been frequently observed which would entitle them to honorable mention in military reports.

After having disposed of the ambulances and left instructions with the Provost Guard at several points of the road where to direct the wounded, I returned to Savage's Station.

Savage's Station is a point on the Richmond and York river railroad, about seven miles from Richmond, within a few yards of which Mr. Savage has a fine dwelling house, surrounded by a beautiful sloping green sward, shaded with large oaks, and inclosed by a paling. There are in addition, adjoining the family residence, negro quarters, barns, and sheds, twelve or fourteen in number; all together being sufficient to accommodate 500 men. Within a short distance is an ample supply of water. These premises were at the moment occupied by General Heintzelman as his Headquarters, who with his staff was encamped in tents on the green immediately adjoining the house. Probably 500 wounded men were already collected in the grounds.

After consultation with Dr. Milhau, Medical Director of General Heintzelman's Corps, we began the difficult work of organizing a hospital. Surgeons were directed to report for duty—stragglers were impressed as nurses, cooks, and attendants—boxes containing culinary apparatus, bandages, medical stores, etc., found at the depot, were unceremoniously broken open—commissary stores were confiscated—two large iron kettles were found, and men assigned to duty in keeping one of them supplied with hot coffee, and the other with boiled rice.

Three principal depots were established for cases demanding operations, one in a barn, one in a hospital tent, the only one we had, and one under the shade of a tree in the rear of the house. To each of these depots from one to three surgeons were assigned with assistants. Other surgeons were detailed to the separate and detached buildings, and still others to the care of the wounded lying upon the ground.

It took some time to get the entire machinery in order, but after a few hours, what with supplies of instruments, bandages, portable soup, etc., sent to us from the White House by Dr. Tripler, and lemons, with sundry other articles, sent to us by the Sanitary Commission, a fair degree of system was attained, and the wounded began to receive tolerable attention.

When it is considered, however, that so terrible a conflict had not been anticipated, and no hospital preparations had been made at any point nearer than the White House, it cannot be supposed that, to some extent, all the wounded did not experience inconvenience, and that others did not actually suffer from delay or neglect. During the first day and night probably one thousand men demanded succor; not more than one half of whom could be accommodated with shelter. The grounds were literally covered with these poor fellows, and when night came it brought, as is very common here after a sultry day, a drenching thunder storm.

We did not sleep that night—I did not, and if any medical officer sought rest, it must have been because exhausted nature compelled a suspension of labor; for the occasional

cries of acute suffering from every side, and the silent, patient, uncomplaining endurance of pale and delicate looking boys, of men deprived of limbs, of soldiers of all ranks, privates and officers, upon whose faces death had fixed his mark—these were reasons why we could not think of rest. Very few had blankets; and, lying with their faces to the clouds, they watched for the day. With scarcely an exception these brave men met the storm of rain and wind during that night as they had met the bullets of the enemy during the preceding day, without flinching.

Capital surgical operations, necessarily suspended at night, were resumed in the morning; and not long after daybreak the heavy roll of musketry in front notified the surgeons that new work was preparing for them.

During the night one load of wounded men had been sent down to the White House, but although the current of wounded coming in from the field had slackened, yet it never entirely ceased, and before morning our number was greater than on the preceding night.

About seven A.M. the avenues in every direction leading to the Station, were filled with wounded men coming in slowly on foot, on stretchers, or in ambulances.

Fortunately we had received before night on the day previous, valuable accessions to our Medical Corps in a number of volunteer and contract surgeons sent up to us from the White House. Our own surgeons had been laboring all the day and night upon the field, and were to-day more needed with their regiments than yesterday.

The gentlemen sent to me were distributed as follows. *Volunteers:* Drs. W. H. Page and A. B. Hall to the hospital tent; H. O. Hitchcock to negro hut No. 1; John Swinburn and John V. Lansing to the barn No. 1; Dr. Burr to the wounded in the yard. *Contract Surgeons:* Dr. F. C. Green to remain at the cars and embark the wounded; Drs. A. Millet and L. D. Seymour to barn No. 2; Drs. J. A. Jacobs and P. Middleton to barns Nos. 3 and 4; Dr. Jas. M. Good to barn No. 5; Dr. Joseph Underwood to hut No. 2; Dr. Alexander Monroe to the dwelling-house of Mr. Savage; Dr. Charles Lodge to Antioch Church, about one mile below; Dr. T. I. Kerby to a house a little further down; Dr. J. L. Sutton to a house near Bottom's bridge; Dr. Elisha G. Esten to another house, containing 100 men.

The wounded had, without instructions, gathered in several buildings along the line of the road; and to these places, as soon as they were reported to us, we sent the gentlemen last named.

It became necessary also to detail one or two medical men to stand at the entrances to the grounds, with attendants, in order to unload the ambulances, get them out of the way, and to distribute the wounded.

All day the wounded came in, and all day the trains bore them off. A second night found us with the numbers not diminished, and to the Medical Officers and faithful attendants the work no nearer its completion. Again about midnight a severe thunder storm passed over us, this time accompanied by a driving wind which tore away, in some cases, the poor shelter we had constructed for the men; but—it is strange—there was no complaining, while they had been lying on the open field, two nights and one day, many had been carried off by the cars, many had died, but others still waited patiently for their turn. When the order came for the litter bearers to carry them to the cars, they picked up their canteens of water, with the fragments of hard bread which were lying beside them, and turning towards us their bloodless faces, thanked us and said, "Good by, Doctor." I do not remember their names, but I wish I knew the fate of that young lieutenant whose arm was carried away by a cannon shot, and who sat, or leaned, against the foot of one of the trees all this time, and upon whose face I never saw a sign of impatience; and of the boyish-looking private who, wounded in the thigh and arm at the same time, lay upon the grass under a burning sun by day, and under dews and rains by night, washing his own wounds with his left hand, and carefully dividing his single piece of oil cloth with his rough looking comrade beside him.

June 2d, the day after the second battle, the number of wounded brought in was scarcely less than on the previous days. There were those who had been left on the field, and had gradually made their way in, or who had been found in the marshes and woods occupied on Sunday by the enemy. Details of men had been sent out under charge of surgeons, with litters and ambulances, to search in every direction to the extreme outposts of our picket lines. In this duty I took part myself. The dead were lying thick over the whole extent of the disputed grounds, with here and there a wounded man unable to extricate himself from the marshes, abattis, or woods where he had fallen. At one place, in a tent, we found eight of the Confederates, with their wounds undressed, and some of them in a shocking condition.

Notwithstanding the heavy details that were made from day to day for this purpose, it was several days before all the dead were buried. The enemy, although occupying a large portion of the ground after the battle of the first day, had left multitudes of their own dead as well as of ours, unburied. Within a radius of twenty feet of where the gallant Major Van Voltenburg of Bailly's battery lay dead, were fifteen dead Confederates.

The dead horses, around this battery numbering fifty or more, were finally disposed of by consuming them under piles of brushwood.

It is painful to state that so late as the third or fourth day wounded men were rescued from the marshes, who had lain all this time without succor.

We continued to search from day to day during several weeks. On the 16th of June, Dr. Haven, Brigade Surgeon on General Peck's staff, reported to me that he had that day discovered on a piece of ground, recently occupied by our advancing pickets, several unburied dead bodies. On the morning of the 17th, Dr. Haven and myself, with a detail of five men went to the spot, and found the bodies of eleven men, all Confederates, lying in a marsh on the extreme left of our lines, near the point where General Peck first met the enemy so vigorously on the 31st of May. We buried them all, but the remains of only one man were identified: this was Lieutenant A. P. Stovall, of Congers, Ga. His initials were carefully carved by us upon a large pine tree at the head of his grave, and the bearings of the tree carefully noted, in order that his friends might hereafter recover his remains, if they desired to do so.

It is impossible to say precisely how many wounded men passed through our hands at Savage's Station during the first three days after the battle, but it is certain that there were not less than 3,000. The entire absence of anything like a permanent provision for the wounded at this point rendered it imperative that they should be sent as speedily as possible to the rear. At first, and until several car loads had been sent off, we registered the names, company, and regiment of each man, with the character of his wound, and the surgical operation made, but soon the pressure became so greatly disproportioned to the abilities of the Surgical Corps that the enumeration had to be suspended.

Many amputations were made, and nearly all of them, I believe, while the patients were under the influence of either chloroform or ether: chloroform being employed in a majority of cases. Surgeons on the field made a few "immediate" amputations, some of which I saw on the following day doing well, but most of the amputations were "primary" as distinguished from "immediate," that is at periods ranging from six to forty-eight hours after the receipt of the injury, when, to a degree more or less, the system had rallied from the original shock. It is true, however, that only in a small proportion of the cases, even after the lapse of twenty-four or even forty-eight hours, had the system fully recovered from the shock. The long exposure of many of the men upon the field, the chilling rains at night, and the want of stimulants or nourishment, may explain the general absence of reaction. Some sank

soon after the operations were made, but most of the amputations looked encouraging when the subjects of them left the station. As to the final results, we have at present little or no positive information.

It is no part of my intention in this communication to record surgical cases, but only, by a careful circumstantial account of the events which followed the battle of Fair Oaks, and which came under my immediate observation, to convey to the young medical officer some idea of the duties which are likely to devolve upon him under similar circumstances. These events, in precisely the same order, with only slight variations in the details, have been repeated many times during this war under my own eyes. Other surgeons have had a similar experience in a multitude of instances. The number of surgeons in the army is small; there is no thoroughly organized ambulance corps; not more than one fifth of the number of ambulances allowed by regulation is furnished, and not one half the proper number of litters; very few regiments have a transport cart for their hospital stores. Quartermasters are generally occupied in other duties than attending to the wants of the sick or wounded. Commissaries have to provide for the wants of their own regiments or brigades, and cannot supply rations to those, whether wounded or not, who, having fallen to the rear, are compelled to lie down and be fed, or perish within the limits of another command.

The surgeon on the field of battle and on the march, must improvise means to supply all these wants, and to remedy all these defects. He must render himself in some sense, ubiquitous. He must be not only the surgical operator and medical adviser, but he must become Quartermaster, Commissary, Nurse, Cook, Litter-bearer, and finally, Undertaker. The surgeon must do all these things, not because such duties are required of him by the regulations, or are imposed upon him by the commanding officers, but simply because if he did not do them they must, in very many cases, be left undone.

Head-quarters of General Keyes's Corps, July 27, 1862.

THE PRESENT
STATUS OF PSYCHOLOGICAL MEDICINE.

By I. PARIGOT, M.D.,

LATE COMMISSIONER IN LUNACY AND SUPERINTENDENT OF GHEEL, BELGIUM. PROPRIETOR OF A PRIVATE INSTITUTION AT HASTINGS ON THE HUDSON, NEW YORK.

VI.—Public and Private Asylums.

Whatever be the cause, it is a great blessing to find at least one country, North America, where so few prejudices exist against insanity, and where rather a real Christian feeling of charity is practised towards its unfortunate victims; the consequences of such a state of public opinion change completely the moral position of those patients who, having recovered, re-enter society. They are less subject to suspicion or sharp remarks, and, at the same time, the devotion of those medical men who dedicate their life to the direst grievance of our nature stands in its full light of usefulness. These facts must be well known in Europe, since we may read in the *American Journal of Insanity* (April, 1862), that the chief editor of the *Algemeine Zeitscrift für Psychiatrie*, Dr. Lœhr, considers that the North American chemist enjoys many advantages over his scientific brethren of other countries. Dr. Lœhr said in a public speech, that the Americans show a great deal of interest for the asylums; public money insures the greatest care and comfort to its inmates; editors of books and newspapers present gratuitously copies to their libraries, and at last, the physicians who occupy themselves with insanity are supported before public opinion by the generality of the best literary men of the country. The opinions of Dr. Lœhr may perhaps appear somewhat a criticism of what is going on in Europe, where lately the Lord Chancellor of England used invectives against the profession held in high estimation on this side of the ocean. Indeed there exists here a great feeling of justice and true compassion for mental infirmities; a man may lose his fortune, few persons except intimate friends will take interest in him; none will perhaps help him directly, because everybody is aware that with courage, activity, and honesty, the country affords a living to all; that unfortunate man may there perhaps recuperate what he had lost; but if he loses his reason there is a general sympathy for him, he is himself helpless to his own misery, and he must be taken care of! Another general feeling appears prevalent among all classes, that such disease as insanity *equalizes* all ranks among sufferers; we learned from authentic sources that the richest families do not hesitate sometimes to send their invalid friends or relatives in state asylums, which are nevertheless principally affeeted to the relief of the poorer classes; abstractly considered this manner of doing may appear just, nevertheless, practically, a question remains to answer, viz.: Is it good policy, and is the abolition of social ranks between educated and non-educated, between poor and rich insane persons, a favorable circumstanee for the cure and benefit of all classes? We know by personal experience that in America, and this is to be remarked perhaps more in the Brazilian Empire than anywhere else, the middling class composed chiefly of artisans or trades is much more educated than it is generally the case; hence common life in an asylum might perhaps be more supportable in America than in Europe. *Pauperism* is a personal degradation, as Dr. Jarvis, of Massachusetts, denominated it to be, and has only been imported by emigration in America; labor and the far-west solitudes are the remedies against any bad chance! Returning to our object, we were told that in public asylums of North America, when a recent case was to be admitted, room was sometimes made by a rich patient who had to leave the asylum immediately in order to give his place to a poor man; certainly this is but strictly just, for it is not the place of a rich man to occupy at any time the asylum belonging to the poor. Considering, however, that exclusion in another point of view, it may be exceedingly fatal in many cases; its individuals have certain absolute rights which must never be overlooked; supposing a treatment has been commenced under physicians of reputation, in whom the friends and families have put all their hope, why should that rich man be deprived of a right to which he was entitled by his admission? Let people be rich or poor, ideas, feelings, and their consequences take their origin in the very circumstances in which individuals are born or accustomed to; now where a man is surprised by disease, is it just to deprive him of the eares, attentions, or even the respect he supposed due to him? Again, in the normal state of his intelligence, we can certainly trace the cause of desolation of a *once* rich man to the necessity of his recourse to public beneficence, therefore the same often may take place in an asylum where all ranks are mixed. In a general point of view we do not see the advantage of levelling society to one form of thought, opinion, or rule of action; at least, it would deprive us, physicians, of employing moral levers or motives of action peculiar to each class. In insanity each case bears a certain peculiar stamp; its cause, origin, and peculiar circumstances impress a different character to each patient, in consequence of which moral and medical treatment must answer each necessity; thus a patient should live, as much as possible, in a style similar to that which he enjoyed before, surrounded by the samo class of persons which he has been accustomed to associate with; he must even be satisfied in all his *acquired* wants of station in life. I think it an impossibility to level society betweeu insane persons living together, unless by violating in some respect their freedom and individuality. Private institutions correspond to necessities of our social life; in America few of these exist only at this moment, and it is very remarkable that they are not an object of speculation; among money-men, again, there exists an immense difference with the great mass of European private asylums, which generally are mere business jobs. The origin of that evil is that in the beginning of this century state asylums were crected principally with the view of reforming the jails and dens

in which previously the insane were incarcerated. It was not intended to establish hospitals for the special cure of that disease; in view of the great number of sufferers an economical principle was sought after to accommodate the greatest number at the lowest cost; now, under the constant appeal of their medical officers asylums transform themselves in hospitals. But the large private institutions of Europe remain of course behind the general progress because they have only *profit for an object;* a great many of these institutions are even without physicians to attend the inmates, or they present cards having only nominally physicians who occasionally visit the establishment! We must notice, and do it with great pleasure, that private asylums kept by American medical men are of the highest character and held with much estimation by the public; the greatest number of their proprietors are gentlemen who during many years were heads or superintendents of public asylums, and gained the public confidence, and other American doctors who gave such public proofs of their learning that their name is celebrated in the annals of science. Besides, private institutions being able to receive only a few patients, it was found lately *by statistics*, that the cure of insanity was much more frequent in private than in public asylums, and that in consequence such terrible disease has less victims in the upper classes! Why not so for the whole community? Because, as we have already stated, the staff of medical officers of public institutions is much below what would be a fair relation to the number of patients to attend. Indeed, there is but one thing to wonder at, that so many valuable works and journals on insanity could have been published by these medical officers of asylums, in which, as one of them declared in a public sitting of the Academy of Medicine of New York, that the whole admistrative burden is heaped on the shoulders of the superintendents, independent of the scientifical direction.

Reports of Hospitals.

NEW YORK HOSPITAL.

PENETRATING WOUND OF ABDOMEN, WOUND OF LIVER, ETC.—CARIES OF ANKLE.—AMPUTATION OF LEG.—COMPOUND FRACTURE FEMUR (GUNSHOT).

[Reported by JOHN T. KENNEDY, M.D., Acting House Surgeon.]

(*Continued from page* 106.)

THE following surgical cases, though not of rare occurrence, present some points of interest, which it may be fitting briefly to allude to. First, on reference to Case I. An extensive wound is inflicted in the liver, and yet for the whole period of illness there are no symptoms manifested which would point directly to that organ as the seat of the injury, except perhaps the uncontrollable and regurgitant vomiting. There was no sign of jaundice present, and very little prostration. The life of the patient was also prolonged to a considerable length, which effect was due no doubt to the stimulating and soothing effect of the opiates. No one can too highly estimate the value of such remedies in similar cases, not only as regards the effect upon the duration of life itself, but with reference to its rendering tolerable the last and otherwise agonizing hours of life.

The second case illustrates the manner in which irreparable disease of the ankle and bones of the foot is often produced. A low grade of inflammation is set up in consequence of slight but repeated injuries, until finally the bones of the ankle become involved in the disease, and amputation, as in this instance, is the only resource. The same sort of difficulty is too often the result of wearing tight boots, especially where too much pressure is made over the instep.

In the third case of death from secondary hæmorrhage, a practical lesson can be drawn with reference to the use of persulphate of iron as a local application. In hæmorrhages attended with mere oozing, or even where small vessels are the seat of the bleeding, it is excellent and perfectly reliable, but as an adjuvant to other means where large arteries are concerned, the question naturally arises whether it had not better be dispensed with. Its application is always attended with a blackening and infiltration of the tissues, and in case an operation for ligature should be required, the vessel could be found only with the greatest difficulty. Buck's apparatus, which is incidentally alluded to, is universally employed throughout the institution for fractures of the thigh. The principle involved is elastic extension by means of weights and pulleys, with small coaptation splints.

Case 4 has but one point for reference, and that is the situation of the wound, it being, as usual, too high to wound the large vessels of the neck.

Lastly, the fifth case is an illustration of the manner in which serious operations may sometimes be avoided, and yet the patient recover.

CASE I.—*Penetrating Wound of Abdomen.*—John Paul, æt. forty, a native of Maryland, seaman, was admitted May 31st, 1862, in the service of Dr. Halsted, with a wound of the abdomen, inflicted by a sheath knife in the hands of an assailant. On examination after admission, and about two hours after the injury was inflicted, there were found two wounds, each about one and a half inches long, meeting at a right angle, and situated in the right hypochondriac region about four inches from the median line and three inches below the margin of the ribs. Immediately after the injury a surgeon was called, who found the abdominal contents protruding. These he reduced, and closed the opening by means of a suture through each of its branches. This served the purpose only temporarily, for, on entering the hospital, a portion of omentum, about as large as a good-sized almond, was found to have escaped from its natural cavity. The hæmorrhage which had previously existed had then ceased, and he was not suffering any from shock. The patient was placed on his back, the protruding omentum reduced, additional sutures applied, and over the whole a compress properly secured by a bandage. Immediately after sol. sulph. morphine was administered in a fifteen drop dose, and in the course of an hour afterwards one grain of opium, in the form of a pill every hour. Between the hour of admission and midnight the abdomen was gradually growing tympanitic, the pulse at the same time growing more frequent. Regurgitant vomiting soon came on, and continued during the remainder of the night. During the following day tinct. opium was given by the grain dose every two hours, and during all the time the respiration averaged twenty-eight per minute, and the pulse ninety-eight. During the night he would have slept soundly were it not for the vomiting, which by the way was only temporarily controlled by an enema of ʒi of tr. opii. On the second day, June 2d, the stomach became quite irritable, and bits of ice were ordered to be swallowed occasionally. There was moderate tympanites, but not much abdominal pain. Opium was continued at intervals of about three or four hours, and during the day the respiration averaged twenty-three per minute, and pulse one hundred and twenty-five. Vomiting was very troublesome during the night, and could not be controlled. On the morning of June 3d he began to sink, and about 2 P.M. died in collapse.

Post-mortem, twenty hours after.—Body well developed; rigor mortis well marked. On reflecting the abdominal parietes the wound was found to have the extent, character, and situation above described. It was also found that the weapon had transfixed the great right lobe of the liver near its anterior border; that it had also transfixed the gall-bladder, wounded the cystic duct, and penetrated into the substance of the lobulus Spigelii. A large clot surrounded the wound of the liver, and partially coagulated blood, mixed with a small quantity of lymph, occupied the sulci between the intestines. The small intestines were greatly

distended and their peritoneal covering injected, the parietal peritoneum presenting a normal appearance. The upper portion of abdominal cavity, with the contained viscera, was stained with bile. The brain, lungs, heart, kidneys, spleen, and other abdominal organs, were examined and found healthy.

Case II.—*Necrosis of Leg, and Caries of Foot; Amputation.*—Charles Battastini, æt. 26, N. Y., caulker, admitted May 7th, 1862 (Dr. Halsted). Patient is of a healthy family, and, with the exception of an attack of variola, has himself always enjoyed good health until between three and four years since, when he sprained his right foot while running with a fire-engine. This was followed in about a week by a swelling about as large as a walnut, hard and painless, situated over the external malleolus. This state of things continued, without causing him any inconvenience, for about two years, when, running to another fire, he was suddenly seized with pain in the ankle, which soon passed off. About a month after this the ankle on both its outer and inner sides commenced to swell, and has continued gradually to enlarge ever since; but at no time has it confined him within doors, or occasioned much pain. About six months since the outer swelling was opened in two places, giving exit to nothing but blood. Pus soon began to discharge, and continued to do so up to the time of admission. At about the same time also the foot began to be drawn downwards, and now presents somewhat the appearance of talipes equinus. The joint at the same time became stiff. He has been confined to the house since the swelling was opened. Several small spicula of bone have come away at different times. On examination there appear two fistulous openings over the outer malleolus, with protruding fungous granulations. Through these the probe detects dead bone. The ankle measures thirteen inches in circumference, whereas the healthy one is only eleven. Eczema of the affected leg is also noticed, which has existed for eight or nine months. The ankle is dusky in hue, rather hot, but neither painful nor tender. Patient has had syphilis, and is now thought to be laboring under the syphilitic cachexia.

Treatment.—Decubitus. Eczema treated with applications of oiled-silk. Patient advised to have the foot removed.

May 14th.—A small ulcer has appeared over the fibula about at the junction of its upper and middle thirds, through which the probe detects dead bone.

May 19th.—A consultation having been called and amputation decided on, patient was etherized and taken to the theatre, where the leg was amputated about at the junction of its upper and middle thirds. The circular method of amputation was adopted. After removal the diseased parts on dissection presented the following appearances: the bones of the tarsus were distorted and more or less consolidated, the articular ends of the tibia and fibula much expanded, and the articular surface of the tibia extensively diseased.

Patient subsequently made a good recovery.

Case III.—*Compound Fracture of the Femur from Gunshot Injury; Secondary Hæmorrhage; Death.*—Chester Adams, æt. 31, New York, Co. D. 3d Michigan Volunteers, admitted June 15th, 1862 (Dr. Parker, attending surgeon). Patient was wounded by a musket-ball at the battle of Seven Pines. The ball entered the left thigh at about the middle of its outer aspect, and was removed just externally to the femoral vessels and immediately beneath Poupart's ligament. In its course it fractured the femur at about the junction of its upper and middle thirds. Previous to admission the limb was treated by extension with Desault's splint. The apertures of entrance and exit are large and pouting, and discharged freely healthy pus. He was a vigorous man, and his general condition was good.

Treatment.—Extension by means of Dr. Buck's apparatus, with a brick as the weight. Poultice applied to lower opening; dry lint to the upper one. June 16th. Poultice discontinued. June 18th. This morning hæmorrhage took place from the lower opening, nearly a quart in amount, which was restrained by pressure on the femoral artery and the application of lint soaked in liq. ferri persulph. The hæmorrhage caused a state of extreme prostration: pulse scarcely perceptible at the wrist; surface cold and clammy; respiration hurried. P.M. Patient has had a chill, followed by cold perspiration. Pulse 152, very weak. Hæmorrhage has not recurred, but the stomach is very irritable. Ord. tinct. chloroformi gtt. xv. in whiskey and water; also ℞ spir. vini Gallici ʒ ij., beef-tea ʒ ij., tinct. opii gtt. xv.; ft. enema. Patient is allowed to take champagne or soda-water; also ordered sinapism to epigastrium. Extension discontinued. 11 P.M. Patient is evidently sinking: pulse very rapid and scarcely perceptible at the wrist: skin cold and clammy. June 19th. Patient continued to sink, and about 11 A.M. he quietly died.

Post-mortem, twenty-six hours after.—Rigor mortis well marked. Tract of wound was opened by passing a director from the lower opening to the upper one, and dividing from below upwards. Femoral artery and vein were dissected together with the profunda. The point of hæmorrhage was not discovered thus far, and the previous application of ferr. persulph. had so blackened those parts as to render further dissection impracticable. The femur was found greatly comminuted for at least two and a half inches from its head. The wound was connected with the abdominal cavity by a rupture through the internal abdominal ring. Some peritonitis about the opening. Liver and kidneys were very anæmic. Other organs normal.

Reports of Societies.

MEDICAL AND SURGICAL SOCIETY.

DR. T. M. HALSTED IN THE CHAIR.

MEDICAL AND SURGICAL CASES.

STATED MEETING, Nov. 2, 1861.

(*Continued from page* 92.)

HEPATIC TROUBLE AND CONVULSIONS.

Dr. McCready alluded to the case of a gentleman from the West Indies, who some years since had abscess of the liver, which discharged several times through the intestine. Since that time has had considerable pain over the hepatic region, and occasional spasms affecting the right side. During these convulsions the patient suffers acutely, but does not lose consciousness. There is some tenderness over the fourth dorsal vertebra, which extends to either side. Dr. McCready suggested that these spasms were hysterical in their character, he having observed the same kind of convulsive movements several times in men who were suffering from excessive prostration.

Dr. Post had recently removed a lipomatous tumor from the forehead, which had existed for twenty-five years, and had caused a considerable depression in the frontal bone.

Dr. Parker related a case of pharyngeal tumor, occurring in a patient at Bellevue. A man, æt. 54, of spare habit, of good constitution, a rigger by occupation, began to suffer about two months ago from hoarseness, slight dyspnœa, and dysphagia. Just before entering the hospital a fortnight since, the dyspnœa became severe, and one evening the difficulty of breathing was so great that the house surgeon was obliged to open the trachea. There was so much thickening and induration of the crico-thyroid membrane, that a trocar was used in effecting the opening for the tube. This thickening was supposed to be the result of laryngitis. When time had been given for the subsidence of the inflammation, the tube was removed, but in the course of two hours the dyspnœa became so urgent that it was reinserted. In the meantime the patient's general condition grew worse, and the tracheal aperture gradually diminished in size, so as to force the tube outwards. The dysphagia also increased. No evidence of tumor or aneurism was discovered by physical examination.

The patient died from exhaustion, and the autopsy revealed a solid tumor occupying the posterior and left lateral half of the pharynx. The tumor had pressed forward towards the trachea opposite the cricoid cartilage, and had made an opening by absorption into the trachea, where it presented a fungous surface. Dr Flint, Jr., saw the case before it passed into Dr. Parker's charge. The voice at that time was not husky, and there was no difficulty in deglutition, but there was some dyspnœa, and the difficulty in inspiration and expiration was equally great.

STATED MEETING, NOV. 15, 1861.

HÆMORRHAGE FROM WOUND OF PENIS, ETC.

DR. SANDS related a case of hæmorrhage from wound of penis. The patient wounded the penis by sitting on the broken fragment of a pickle jar that had been carelessly thrown into the bath tub in which he was bathing. The hæmorrhage at the time was profuse, but was checked by styptics and pressure. A few days afterwards secondary hæmorrhage occurred, which was again checked by astringents. During a third recurrence, about ten days after the accident, Dr. Sands was called, and after failing to check the bleeding by ordinary means, resorted to ligature. Considerable difficulty was experienced in finding the bleeding vessel. There was a wound of the foreskin on its under surface, through which the blood welled up, but the bleeding vessel could not be found at this point nor in its neighborhood, but on slitting up the skin of the penis near to the scrotum, a wound of the corpus cavernosum was found, from which the hæmorrhage proceeded. A vessel of considerable size was tied, which effectually controlled the bleeding.

DR. PARKER alluded to a case that came under his observation some years since, where the penis was injured, while in the erect state, by twisting. After the injury, only one half of the corpus cavernosum was capable of erection, the other half remaining flaccid. There was some tenderness of the affected side, and some thickening of the theca. Rest, a rigid diet, the use of mercurials for a time, and afterwards of the iodide of potassa, with local blistering, improved the patient's condition wonderfully.

DIABETES TREATED WITH CAMPLIN'S CAKE.

DR. BULKLEY alluded to a case of sacch. diabetes where the amount of urine passed was reduced from 350 oz. daily to 60 oz., under the use of Camplin's bran cake. In another case the amount was reduced from 256 oz. to 70 oz. by the same treatment. The general condition of both patients improved, and the thirst was entirely appeased.

DR. METCALFE alluded to two cases where diabetes had existed in one patient for eleven and in another for sixteen years. The dietetic treatment was abandoned, and the patients improved. Dr. Buck knew of one case where the disease existed for ten years. Dr. McCready had a case under observation for seven or eight years. The patient was a very fleshy woman. She passed a large quantity of urine daily, having a specific gravity of 1·040. She did not lose flesh, and the skin remained moist. She took opium largely, and finally died with head symptoms. Dr. Metcalfe has abandoned for some years the dietetic method of treatment. Dr. Parker's experience has induced a similar conclusion. He alluded to one case in a gentleman seventy-two years old, and to another in a man twenty-five years of age, who passed large quantities of water of high specific gravity, and became much emaciated. He began to drink lager beer, and improved rapidly. Dr. P. saw him two years afterwards, and the improvement was marked.

STATED MEETING, Dec. 7, 1861.

In the absence of the President, DR. BULKLEY in the Chair.

TUMOR OF GROIN.—OBLITERATION OF FEMORAL ARTERY.

DR. WOOD described a case of tumor in the groin following a blow. The patient was a man æt 30. He received a severe blow in the groin, and soon after discovered a hard tumor, as large as his fist, situated in the groin above and below Poupart's ligament. When Dr. Wood saw it, the surface was discolored, and there was no pulsation of the femoral or tibial arteries; the temperature was below that of the other limb. The superficial part of the tumor seemed to be coagulated blood; this was absorbed in time, and left a deeper seated tumor, which still continued to interrupt the circulation in the femoral and ext. iliac. A week afterwards Dr. Wood heard that the tumor was gradually disappearing, and pulsation had reappeared in the tibials but not in the femoral. The tumor is now entirely absorbed, but the femoral is obliterated.

EXTENSIVE NECROSIS.

DR. THEBAUD alluded to a case of extensive exostosis in a boy æt. 11. Every long bone in the body was the seat of exostosis. They began to be developed when the boy was a year old. They are symmetrical in their growth on the two sides of the body; they vary in size from that of a pea to that of a hen's egg, and are unaccompanied with pain. The boy enjoys fair health.

ŒDEMA OF VENTRICLES OF LARYNX.—TRACHEOTOMY.

DR. BUCK related the history of a case in which he had himself been called upon to perform tracheotomy. The patient, a man, æt. 25, returned from Washington some weeks since with typhoid fever, for which he was treated by Dr. Henschel of this city. He had hæmorrhage from the bowels, and while convalescing suffered from superficial cutaneous abscesses in different parts of the body, and especially over a recently blistered surface. A few days previous to Dr. Buck's seeing him, he complained of dysphagia, which was relieved by swallowing a bowl of warm soup. The day before Dr. Buck saw him, he began to suffer from dyspnœa, inspiration being very difficult; deglutition again became difficult, the voice diminished to a hoarse whisper, and the cough croupy; the pulse grew frequent and feeble. When Dr. Buck saw him, there was no evidence of external swelling, nor any tenderness about the larynx. Examination of the fauces and epiglottis revealed nothing. There was no œdema, and no evidence of post-pharyngeal abscess. The existence of obstruction was clear, but the cause was not apparent. The idea of cricoid abscess was suggested, but could not be verified. Tracheotomy was performed. When the operation was completed as far as the exposure of the trachea, the breathing ceased, and the patient assumed the appearance of death. An entrance was promptly effected, and a curved hook introduced so as to hold the trachea open: breathing gradually returned, and a double tube was introduced. The next morning deglutition was much easier. There was some discoloration of sputa with blood, but the cause of the obstruction remained and is still obscured. The patient now swallows solids; during the day he wears the perforated tube, and by closing the opening he can speak in an audible tone. No proof of abscess has yet been discovered, and Dr. Buck is inclined to ascribe the obstruction to œdema of the ventricles—a variety of œdema described by Cruveilhier as occasionally occurring.

DR. CLARK thought Dr. Buck's explanation the correct one. Dr. Markoe thought the pharyngeal symptoms could not be explained by any intra-laryngeal difficulty. Some difficulty in deglutition still exists. Dr. Buck used in this operation Trousseau's forceps for holding open the incision in the trachea; they are useful in controlling venous hæmorrhage, and allowing the easy introduction of the tube.

STONE IN BLADDER.—LITHOTRITY.

DR. MARKOE related a case where he had recently operated for stone in the bladder. The patient was a boy, æt. 8, who had suffered from symptoms of stone for eighteen months. The stone seeming to be a small one, the median operation was preferred. The grooved sound was introduced into the bladder, and forefinger of the left hand passed into the rectum so as to fix the prostate. The sound being firmly held, the point of the knife was entered at the anterior margin of the prostate, about one inch

anterior to anus, and carried forward into the bladder; the finger was then passed through the incision into the bladder, and the wound dilated so as to allow the entrance of the forceps. The stone was fortunately seized so as to present its short diameter to the opening, and easily extracted; it proved to be larger than was anticipated, being oval in shape, and about an inch and a quarter in its long and three-quarters of an inch in its short diameter. Three hours after the operation, the patient got up and passed his water through the natural passage. He had entire control of his water after the operation, and at the end of fourteen days the wound was almost healed.

CANCER OF UTERUS IN VERY YOUNG PATIENT.

Dr. Elliot related a case of cancer of the uterus in a very young patient. An English woman, æt. 21, miscarried on shipboard, on her passage to this country. Dr. Elliot saw her for the first time in March of this year. She had at that time a fetid discharge, which had existed since the miscarriage, and from this, and the condition of the cervix, cancer was diagnosticated, though the patient had no evidence of cachexia. Dr. Elliot never saw the woman afterwards until a few weeks since, when he was asked to see a case of cancer of the uterus at Bellevue, and recognised his patient, now rapidly sinking under the disease. She died, and at the post-mortem examination the diagnosis was confirmed. The vaginal cervix was eaten away by cancerous ulceration, the recto-vaginal cul-de-sac was obliterated by adhesions, and there was extensive pelvic cellulitis. At two points the peritoneum was just ready to give way, and pressure caused pus to exude into the peritoneal cavity. The liver was very fatty. Peritoneal inflammation had been prevented probably by adhesion.

The Society then adjourned.

American Medical Times.

SATURDAY, AUGUST 30, 1862.

MEDICAL INSPECTION OF RECRUITS.

The United States are about to present to the world the largest and best appointed army of modern times. One million of men will be its minimum strength, and its equipments will embrace every invention known to modern military science. Such an army, thoroughly disciplined, and led by competent officers, would seem capable of accomplishing any given object, whether for conquest or defence. And yet history has always taught what we have now learned by grievously sore experience, that the efficiency of an army does not depend upon its numbers or its equipments, but upon the physical strength of the individual soldier.

In the formation of the army the medical profession bears a most important part, for to it is assigned the task of selecting the materials of which the army is to be composed. Government commits to the inspecting surgeon the grave responsibility of determining the physical health of the recruit. Of the value which other governments place upon these duties we have the most positive evidence. The Prussian regulations state:—"The duty of inspecting recruits, and of determining whether they are fit or unfit for the military service of the country, is one of the most difficult and responsible that an army surgeon has to perform. The Austrian regulations have the following:—"The duty of inspecting recruits and conscripts requires the utmost impartiality, skill, and circumspection on the part of the medical officer." And an experienced writer has said:—"In a financial, a political, and perhaps, I may add, in a medical point of view, I am not aware of any part of the duty of a medical officer which is of more importance than the inspection of recruits on a large scale, and the examination of inefficient soldiers; and, consequently, these duties deserve a very careful consideration."

That our Government regards it as no trivial matter to pronounce upon the health of the recruit, may be inferred from the following certificate which the surgeon is required to sign:—"I certify on honor, that I have carefully examined the above-named recruit, agreeably to the General Regulations of the Army, and that in my opinion he is free from all bodily *defects* and *mental infirmity*, which would in any way disqualify him from performing the duties of a soldier."

The regulations of the recruiting services of the United States are sufficiently stringent, and if implicitly followed would give to the ranks only qualified men. The medical examination is required to be systematic and complete in all that pertains to the person's present and past life, as well as to his physical condition. The regulations are:—"In passing a recruit, the medical officer is to examine him stripped, to see that he has free use of all his limbs; that his chest is ample; that his hearing, vision, and speech are perfect; that he has no tumors, or ulcerated or extensively cicatrized legs; no rupture or chronic cutaneous affection; that he has not received any contusion or wound of the head, that may impair his faculties; that he is not a drunkard; is not subject to convulsions; and has no infectious or other disorder that may unfit him for military service." The surgeon who does his duty faithfully, amplifies the details of inspection so as to detect every possible disability. He will thoroughly inspect the external surface; he will test mental capacity by examination of the head, and by well selected questions; he will test vision and hearing by experiment; the viscera of the thorax and abdomen by percussion and auscultation; the limbs and joints by exercise. In this manner he will pass in review every organ, every function, and every source of disability. Such an inspection requires both time and experience. No man could make such an examination as the army regulations establish hastily; the minimum of time would be what a conscientious physician would require to determine an obscure disease. Nor can a civil practitioner enter upon this service as a qualified person; the inspection is for a special service, and only the surgeon familiar with the peculiarities of such service, by long experience, can be well qualified to discharge this duty.

The medical inspection of recruits for the volunteer service, as now conducted, is in too many instances a gross abuse of a most important office. The examinations are so superficial at many recruiting stations, that the most obvious defects are overlooked. The army is being filled with old men and boys, and recruits having such disabilities as defective vision and hearing, anchylosed joints, hydroceles, hernias, aneurisms, etc. If we add to these defects the more latent diseases of the internal viscera, which necessarily escape detection, and which will assume an active character in service, no one need be surprised at the overflowing condition of the military hospitals of the country as soon as the army commenced active operations. It can

scarcely be credited, and yet it is stated on the best authority, that a single medical inspector has regularly passed two hundred and fifty men daily, occupying eight hours each day. The examination of each recruit in this case occupied on an average less than *two minutes!*

Faulty medical inspection admits of a prompt and complete remedy. First, let a sufficient number of inspectors be appointed at each place of rendezvous, so that the labor shall not be pressing. The State of New York will put nearly one hundred and fifty thousand men in the field. Here is work for a score or two of inspectors, and yet it has but three! However anxious these gentlemen may be to do their duty faithfully, the thing is simply impossible. Again, they should be paid by the day, and not by the head. The temptation which fifteen cents a recruit holds out to a young physician to make a good day's job, by passing a large number, is unwarranted by any want of the service. Finally, the medical inspector should be a man of experience, and hence should be taken from the regular service. There are many surgeons of the Army who are invalided, or have been retired, but who are able and willing to undertake such labors. To them might be assigned, very properly, this duty.

Shall not these abuses in the recruiting service be corrected while yet the public service may be benefited? Napoleon is said to have thus remonstrated with the Legislature of France:—"Shame on you! I demanded a levy of three hundred thousand *men;* but I must have *grown* men. Boys serve only to fill the hospitals and encumber the road sides." Our government has called for twice three hundred thousand men, and shall she not have grown and able-bodied men rather than the lame, the halt, the blind, with which to further encumber our hospitals?

THE WEEK.

The value of a rigid Sanitary Police in the preservation of the health of a city peculiarly exposed to contagious and infectious diseases, is strikingly illustrated at New Orleans. Under the inflexible military rule of Gen. Butler the streets are thoroughly cleansed, all nuisances are removed, and quarantine is made effectual upon every vessel from infected ports. As a consequence that city, though in intimate commercial relations with ports where yellow fever is now prevailing in the most fatal form, is unusually healthy. In what disparaging contrast does New York appear under the sanitary supervision of a self-vaunting Board of Health Commissioners! Streets reeking with filth in an August sun, nuisances of every description around the tenements of the poor, and a quarantine managed for the personal gain of a few, are the legitimate fruit of our health regulations. The people of New York should understand that they are in great danger of an epidemic of yellow fever this season, through the grossest mismanagement of the quarantine, and that by the sanction of the Health Commissioners. Infected vessels from ports where yellow fever now prevails in its most virulent form, are allowed, in positive violation of law, to come to the upper quarantine, and finally to discharge their infected cargoes at our wharfs. How long will this be done with impunity? Gen. Butler replied to the Spanish Consul, who asked that a vessel from an infected port might pass quarantine and receive a cargo of tobacco, that the health of New Orleans could not be offset by any amount of tobacco! We sadly need such energy and devotion to the public weal in the regulation of our quarantine.

—

The British Medical Association recently held its thirtieth annual meeting at London. It was largely attended, and its proceedings were of the most interesting character. The President, Dr. Burrows, delivered an opening discourse, in which he traced the rise and progress of the society, and its past, present, and prospective objects. The address in medicine was delivered by Dr. Walshe, and the address in surgery by Mr. Paget. The former address is said to have been thoughtful, eloquent, and brilliant, and Prof. Bennett, of Edinburgh, in moving thanks to the orator, said:—"We need, indeed, not despair of our profession attaining to the highest rank in the world of intelligence, so long as such men as Dr. Walshe live to inspire it with the force of their eloquence." Of Mr. Paget it is said:—"For sixty-five minutes did that gentleman pour forth one unhesitating stream of true eloquence, without a note or a line to aid his memory. Not mere words, not *vox et preterea nihil,* was his discourse; every word was incisive and to the point; there was nothing superfluous, and nothing wanting. It is saying little to add, that from first to last he riveted the attention of his audience. One only regret was occasioned by his words, and that was when they were ended." The session lasted four days. The Association seems to be in a highly prosperous condition.

—

Officers returning from Richmond have frequently stated their gratification at meeting in the rebel army a trained Ambulance Corps, and express their surprise that we still cling to the old system of having soldiers help their comrades from the field. It is remarkable, that in the organization of the army so important a matter should be overlooked. In our time, when projectiles are so unerring and fatal, there is more than ever need of an ambulance corps, thoroughly trained, to follow the advancing columns and succor the wounded immediately, and thus leave the soldier untrammelled by a duty so foreign to his proper service. In the French army this corps is under as complete discipline as the rank and file of the army. Such careful provision for the wounded, also, adds much to the morale of troops. We believe the authorities have appointed a Commissioner to devise a plan for an ambulance corps, but we regret that attention has not sooner been given to the matter.

—

We alluded some time since to the appropriation of a sum of money by Congress for the purchase of artificial limbs for maimed soldiers. A Commission consisting of several of the most eminent surgeons in the country is about to be convened in New York by Surgeon-General Hammond, in order to decide upon the best method of applying this fund. They will select the limbs best adapted to the purpose, and make such recommendations as seem advisable after due deliberation. We again express the hope, that medically-educated mechanical surgeons will alone be found worthy of the patronage of Government.

—

The Medical Examining Board for contract surgeons in New York and Philadelphia have been adjourned by order of the Surgeon-General.

Correspondence.

LAND SCURVY.

[To the Editor of the American Medical Times.]

Sir:—In a letter from Brigade-Surgeon Chas. H. Rawson, in the Medical Times for July 19, 1862, I find the following observations, which have been so fully corroborated in my experience, and are so vitally important, that I desire to call the attention of the profession to them, so that in future the disease which Dr. Rawson so well describes, may be prevented, and that where it now exists undetected, it may become known and cured.

Speaking of the diseases most prevalent in the army of the west, he says:—"But the most singular of all diseases is a species of land scurvy that is very insidious in its effects, and I think many men are suffering from it, who are being treated for many other diseases." The symptoms are many, and are well described in the letter alluded to; general debility appears to be an important cause of this malady; the men complain that they are daily becoming weaker, great muscular weakness, sometimes soreness with red spots, ecchymotic and swollen feet and legs, rheumatic pains affecting bones, muscles, or any and every portion of the body. Some have pale, waxy, puffy, and anæmic swelling about the face; a few show ulcerated gums and mucous membrane, but they are comparatively few. appetite capricious, and bowels irregular, but generally have diarrhœa. In short, all of the symptoms of scorbutus as described in our Text Books. But I refer the reader to the letter itself, containing much else that is interesting and valuable in a short space, for a fuller exposition of Dr. R.'s views; I wish here simply to second them.

There have been, since the 9th of July, about one hundred sick soldiers treated in the wards of the 3d Medical Division, Dr. Loomis, visiting physician, until Aug. 1st.—since which time Prof. Flint has had charge of the service. Of these patients, many were convalescents from typhoid fever, but of the remainder fully one half, about 35 per cent. of the whole number, were, and are affected with this disease. To be sure, quoting again, "Many of these men show no symptoms by mouth or countenance, and the indications of health are so striking" that one would at first glance pronounce them fit for duty, but a closer examination reveals their trouble. Quite a number, in whom there were no symptoms referable to the mouth and gums, have developed them while under treatment. That the men themselves were unaware of their disease, was evident from the answers they made to the question, "What is the matter with you?" Kidney disease, chronic rheumatism, swelling of feet and limbs, etc. etc.; and in one or two instances one of these a lieutenant, soreness of the gums, looseness of teeth and hæmorrhages from mouth, were the answers most commonly given.

The men under treatment were all from the Army of the Potomac, some of them from the Richmond hospitals. Many of these men have fleshed up, gained strength, appetite, and spirits, but are still weighed down with the stiffness and swelling of the limbs, and the excruciating pains, with the sore gums. They are all having the vegetable diet, with tonics, iron, and quinine.

The diarrhœa in these patients seems to be checked in proportion as they recover their general health and tone. General debility, instead of being a cause, as Dr. Rawson seems to think, appears to me to be another and most important symptom of scurvy, and sometimes has been the only symptom present, except the wandering "shooting" pains, on which to found a diagnosis. No deaths have occurred from this disease in the hospital.

Measures have now been taken to supply the army with vegetables, and the subsistence order of Gen. Pope coming into effect, will tend to prevent the future ravages of this disease, but still it is to constant vigilance and prompt action on the part of the medical staff, alone, that the coming six hundred thousand recruits must owe their safety from scurvy.

Respectfully yours,

Francis R Lyman, M.D.
House-Physician.

Bellevue Hospital, New York, Aug. 20, 1862.

SICKNESS IN THE ARMY OF THE WEST.

[Army Correspondence of the American Medical Times.]

Corinth, Miss., Aug. 8th, 1862.

Sir:—Since I last wrote you every effort has been made to close up all the hospitals between this place and the Tennessee river, and I am happy to state the last place is closed except one—the general hospital at Farmington, that now has 175 patients too sick to move at present. As it contains the final remnants of all the others, it will take three weeks probably to remove them all. Jackson, Tenn., has been decided upon as the place to establish a large general hospital, where all the sick for this portion of the army will be sent. It is fifty-seven miles north of this by the Mobile and Ohio Railroad, and is considered the healthiest place in West Tennessee. Beds are being prepared for 1,000 patients, and we may double the number.

Diarrhœa, some dysentery, remittent and typhoid fevers, and scurvy, are the principal diseases at present. The latter prevails more extensively than it ought, but it is very difficult to get fresh vegetables in any quantity, nearly everything having to be brought from the north. The U. S. Sanitary Commission are furnishing some eggs, chickens, potatoes, etc., to general hospitals, but the supply is nothing to the demand and requirements. The Government ought to have agents to purchase abundance of everything, and pay from the hospital fund, but as yet I can get nothing done. Some of the hospitals have two to four thousand dollars due them, and yet can do nothing with it, as nothing can be purchased here. Every one sees the necessity, but changes are so constant, it is difficult to get anything done.

The last load of sick went down the Tennessee river today, that will probably go by steamer this season, and those old hospital stations, Savannah, Pittsburgh Landing, Hamburgh, etc., are deserted, and will only be remembered in history, except by the many thousands whose personal experience has been such as to indelibly press upon their minds the days and possibly weeks of discomfort and misery passed there. The health of the army is very good indeed, considering the season of the year. Hoping to hear from you soon, I remain as ever,

Yours, etc.,

Charles H. Rawson,
Brig. Surg. and Acting Medical Director, Depart. Miss.

FOREIGN MEDICAL INTELLIGENCE.

There has happened recently in Paris a curious affair which strikingly illustrates the power of example, or nervous contagion. The infants of the parish of Montmartre were assembled to partake of their first communion. There were collected in the church 150 boys and nearly an equal number of girls, which, with the assistants, would make about 500 persons. The ceremonies continue for several days, and during the first day, although none of the exercises were of an excitable nature, three of the young girls fell senseless and had convulsions for several moments. On the second and third day, the same number were taken in a similar manner, and on the fourth day four other young girls reproduced the same accident. By this time the ecclesiastics began to think that they were exciting the children too much by praying so strong, and it was agreed in consultation to diminish their ardor. But in spite of this precaution, the fifth day's ceremonies exhibited similar scenes to an exalted degree, for on this occasion no less than thirteen were seized with convulsions and carried crying from the church. And during the evening services of this day,

twenty more were taken, some attacks being slight, while others were terribly severe. Several kept convulsed an hour and a half, and evinced many grave symptoms besides.

On the sixth day, which was the day after confirmation, fourteen children fell prostrate, smitten as if from fear into trembling and convulsions, as the archbishop laid his hands upon their forehead. The contagion showed great partiality as to sex, for not one of the boys became affected during the six days of religious performances.

I am the recipient of a little work, titled *La Thrombose et de l'Embolie Cérébrale*, by Dr. E. Lancereaux, of Paris. I believe I do not err in judgment when I pronounce this a most excellent and original treatise on arterial affections. I could say even more in its praise, but too great enthusiasm on my part might be ascribed to partiality, for the author was once my teacher in *La Pitié*, and is still my dear friend.

Thrombose means an arterial blockade. Embolie means the same; but in *embolie* the material obstructing has floated to the point where found, whereas *Thrombose* originates chiefly from disease of the arterial coats. It is incontestably proven by the author that one or other of these conditions is the cause of occlusion in the vessels of the encephalon, and consequently of *ramollissement*. The brain substance, in the accomplishment of its degenerative evolutions, has three successive periods anatomically characterized by an alteration of color and consistence. Red and scarcely softened in the first period, markedly pulpous and yellow in the second, and in the third white and diffluent. Cerebral ramollissement and all alterations accompanying it, which recognise for cause arterial occlusion, are constituted by *métamorphose régressive* of the normal elements of that portion of the organ once nourished by an obliterated artery. Symptoms following this condition are generally characterized by some form of paralysis, but by far the most common is sudden hemiplegia, with or without loss of the senses. Symptoms of cerebral hæmorrhage bear great resemblance, but differ in their march, etc.

The divers forms of cerebral ramollissement owing to obstruction of encephalic vessels (arteries, veins, or capillaries), possess anatomical and clinical characteristics which clearly distinguish them from other forms of the same disease with which they have been invariably confounded.

I did not at first intend to write even this little on the work in question, for I am well convinced of my inability to touch, transpose, or meddle in any manner with the brilliant writing of the author.

CYGNET.

Medical News.

"THE LATE EDWARD STANLEY, ESQ., F.R.S., Surgeon to St. Bartholomew's Hospital.—The medical profession will regret to hear that this gentleman, so long and so intimately connected with St. Bartholomew's Hospital, expired suddenly in one of the wards of that noble institution on Saturday afternoon. As a member of the Court of Examiners of the Royal College of Surgeons, he had been much engaged until a late hour nearly every night in assisting at the examinations of the large number of candidates now undergoing that ordeal. On the evening of Friday, the 23d instant, he left in excellent spirits. He rose on Saturday morning at his usual hour; and, having received and attended to his patients, repaired to St. Bartholomew's Hospital. In the act of addressing his friend, Mr. Arnott, on a case before them, he was observed to falter in his speech, and instantly to fall on the bed. Mr. Wormald, one of the surgeons of the hospital, afforded him instant assistance, and to this gentleman he whispered a few words stating he should soon be better, and desiring him not to feel alarmed; but, notwithstanding the kind and unremitting attentions of his colleagues, he soon ceased to exist. Mr. Stanley had not been a large contributor by his pen in the advancement of chirurgical knowledge; but what he wrote he wrote well, as evidenced in his standard work on the *Diseases of the Bones*. He was also the author of a mode of performing the lateral operation of lithotomy, and also of a *Manual of Practical Anatomy*. Mr. Stanley, in addition to the appointments already mentioned, held that of Surgeon Extraordinary to Her Majesty the Queen. The lamented deceased leaves a widow and three daughters, and one son in the Church."—*Brit. Med. Jour.*

MEDICAL STOREKEEPERS.—The six medical storekeepers, provided by the recent act of Congress, have been appointed by the Secretary of War, upon the recommendation of the Examining Board, and assigned to duty at the principal army purveying depots. A large number of applicants were examined by the Board, and the appointments made purely with reference to their relative competence. They have been assigned to duty as follows:—George Wright to Surgeon R. S. Satterlee, Medical Purveyor, N. Y.; Henry R. Rittenhouse to Surgeon R. H. Alexander, Medical Purveyor, Army of the Potomac; Robt. T. Creamer, to Assistant Surgeon C. F. Alexander, Medical Purveyor, St. Louis; Victor Fuller, to Surgeon George E. Cooper, Medical Purveyor, Philadelphia; Henry Johnson, to Surgeon H. Laub, Medical Purveyor, Washington; Henry Stephens, Medical Purveyor, Cairo.

SURGEON W. F. EDGAR, formerly Medical Director at Cairo, has been ordered to report for duty to Medical Director McDougall, at New York. Medical Purveyor Baxter has established a medical supply depot at Alexandria, for the Army of Virginia. Dr. M. J. Davis, of Pennsylvania, has been appointed Assistant Surgeon, and ordered to report to Dr. Webster, Douglas Hospital. E. M. Tamisly, D. C. Beebe, and G. L. Menzie, have received appointments as Medical Cadets. The Adjutant-General has ordered the medical storekeepers recently appointed to report for duty.

THE health of Providence in July, as indicated by the mortality returns, was so remarkable as to deserve a brief notice. The number of deaths was one less than in June; 31 less than in July of last year, and 25 less than the average for July during the last six years. The number was also less than in any year, except one, since 1842, when the population was less than half the present number. The fact that there were fewer deaths in July than in June, is unprecedented in the twenty-two years' registration in this city.

AT a recent general meeting of the members of the Society for Relief of Widows and Orphans of Medical Men in London and its vicinity, it was announced that £977 had been distributed in half-yearly relief amongst forty-five families of its deceased members, besides £63 given in casual relief.

MR. SPENCER WELLS, in remarks on ovariotomy lately made by him, states "the girl last operated on was my fortieth case of ovariotomy. If she recovers, which I have no doubt she will, it will give a result of twenty-four recoveries to sixteen deaths—a proportion of exactly two recoveries to three operations."

PRIVATE PHYSICIANS.—No more private physicians are needed by the Government, the last act of Congress authorizing two assistant surgeons for each regiment, supplying all deficiencies. The Medical Examining Board for examining contract surgeons in New York and Philadelphia has been discharged.

A RESERVE corps of experienced surgeons have been sent to the Army of Virginia. Surgeons Vollum, Purdy, Stewart, Potter, Coolidge, Woodward, McKee, Allen, and Brinton, have been sent to join the corps.

CARE FOR THE SICK AFRICANS IN SOUTH CAROLINA.—Gen. Saxton has made contracts with Drs. Hawks, Bundy, Wakefield, and McClintock, to attend to the health of the Africans in Gen. Hunter's department.

SURGEONS John B. Porter and W. F. Edgar have been retired.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL IN THE PRELIMINARY COURSE.

SESSION 1860-61.

LECTURE XII.—PART III.

BY A. JACOBI, M.D.,

PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Different Opinions on the Nature of Infantile Paralysis—Laryngismus Stridulus, and its Presumed Relation to Dentition.

AFTER all, the difficulty of a correct diagnosis in many cases of essential paralysis cannot be denied. If any other proof were required, it would consist in the variety of opinions concerning its etiology. Thus E. Müller contends, that although the febrile first stage be very short, the symptoms allow of no other explanation than that the seat of the diseases must be sought for in the central organs of the nervous system; whether there is congestion or exudation, whether they are local or diffuse, must differ according to the cases. Sandras, who is quoted by Dr. von Heine, says that extravasation into the spine is characterized by sudden and obstinate paraplegia, but thinks by no means that every case of sudden and obstinate paraplegia results from spinal hæmorrhage. Warnatz is in favor of attributing the disease to a spinal affection, inasmuch as the mental functions of the senses were not interfered with; and also greatly to the dyscrasic influences, syphilis, scrofula, and, more than any other, rhachitis. Bräuning seeks for the cause of essential paralysis in diseases of the nervous system in general, in the spine, and diminished innervation resulting from organic changes, and slight compression (extensive pressure would bring on death, in his opinion) or from some morbid condition of the nerve. Vogt takes it as the remnant of a disease of either the nervous centres or the nerves, with their membranous envelopes, which can be nothing else but either congestion or inflammation with their final consequences. Rilliet and Barthez, West, Bouchut, Marshall Hall, Kennedy, take it as a peripheric disease; dental irritation, remittent fever, convulsions, worms, intestinal affections, influence of cold temperature, sitting on a cold stone, etc., etc., are accused as being the causes. Shaw supposes the disease to depend on a sudden change taking place in the brain or spine. Brown-Sequard, finally, takes infantile paralysis as a reflex-paralysis, the existence of which he, like his assistant, Dr. Echeverria, now in this city, tries to prove with all his immense learning in both physiology and pathology. Naturally, dentition and worms have their part to play among the proximate causes.

I have merely to add, that as I have above given my opinions as based, I believe, on the symptoms and the facts of pathological anatomy, I am not willing to give up an explanation of this kind for any other, although it be more brilliant and more surprising. Nor am I ashamed to say that there is no uniform anatomical alteration in all and every one of the cases of infantile, or essential, or dental paralysis. The symptoms are such that they can be explained by a certain number of pathological conditions, and it is not my fault that, in nature, the same ends will be frequently obtained by multifarious causes. If really dentition had anything to do with this paralysis, it could be so in but few cases, and be only explainable by the assumption of reflex-paralysis; for a subsequent hyperæmia of the brain or spine would again justify my more anatomical explanation. How absurd, however, is it to baptize it dental, for no other reason but that a few cases may possibly be induced by some anomalies in the protrusion of a tooth. In every case, moreover, of any disease, we ought first to inform ourselves of its nature, its anatomical basis, and its seat, and then at last to look for the occasion on which it commenced, and the proximate causes by which it has been brought on. If no cause could be found in any case, the name "essential paralysis" would be the better one in my opinion; but as in the majority of cases a differential diagnosis can be made with either certainty or probability, it is merely scientific to determine its character in the diagnosis, and the name applied to the disease.

Another disease, which is almost always considered as being in a causal relation to dentition, is laryngismus stridulus, or crowing inspiration of children.

Laryngismus is emphatically a disease of infantile age. It is observed as well in apparently healthy as in sick children, in their sleep or while they are awake, playing, eating, singing, or to the contrary, when irritated, or excited. The first stage of an attack of laryngismus is a sudden and entire apnœa. Respiration is stopped suddenly, completely, for a few seconds, even for a minute, the face is bloodless and pale, and cyanotic in attacks of long duration, the skin cool, the heart scarcely perceptible, the entire muscular system in a state of paralysis. The second stage is that of beginning reaction to this complete inactivity; the recurrent branch of the pneumogastric nerve commences again to stimulate the function of the muscles of the glottis, and the spinal nerves again enliven the other respiratory muscles to such an extent as to produce a forced, deep, "crowing" inspiration. In the third stage, finally, reaction is complete. Short convulsive expirations restore the functions of the respiratory organs to their former condition. Attacks of great intensity and long duration are generally attended with contractions of the hands, and even general tonic convulsions of the trunk (opisthotonus) and lower extremities. Sometimes general eclampsia has been observed to accompany the attack of laryngismus, but also to return without an attack, or an attack of laryngismus to return without eclampsia. Involuntary evacuations of the bowels have been observed during the attack; these are the consequences of paralysis of the sphincter muscles. Laryngismus is seldom fatal; a large number of attacks have sometimes occurred in a single day. The disease is apt to last for months, and even years. Whenever death ensues in the attack, it does so in the first stage.

The mildness or severity of the attacks of laryngismus depend on both the constitution of the patients and occasional causes. The milder form is particularly recognised by a milder appearance of the first stage, viz. the sudden paralysis of the respiratory muscles, and the slightness of the accompanying carpo-pedal or other symptoms. Of this kind are those mild attacks which have been described by Rilliet and Barthez, Hérard and Ranking, and called "holding-breath spells" by J. Forsyth Meigs. Here, the first stage is not very violent, and crowing expiration is not always perceived, but in the cases witnessed by myself, I have never missed the convulsive expirations constituting the third and last stage. Altogether, I am unable to discover any other difference between an attack of "laryngismus," and one of "holding breath spell," but that of a different severity of symptoms of the same affection; for in my mind there is no doubt that the assertion, that the latter "never occurs spontaneously, and never during sleep," and that "the most frequent cause of the paroxysms is contradiction; that they are determined also by fright, pain, and crying," is either not quite correct, or not quite complete.

The symptoms of the first stage of laryngismus cannot be explained except by a functional trouble, by paralysis, perhaps of the oblongated spine, perhaps of all the nervous centres together. Paralysis of the muscles of the glottis alone is unable to produce all the symptoms of the first stage of laryngismus; for by cutting a recurrent nerve such general symptoms could never be produced. And the dissection of both the recurrent nerves gives rise to real

suffocation, pretty rapidly, but not at all suddenly; lungs and brain become hyperæmic, and the heart and cutaneous veins full of blood; whereas post-mortem examinations in laryngismus show a positive absence of hyperæmia in the brain, and no, or very little, blood in the heart and cutaneous veins. Death ensues in laryngismus in the same manner as in animals whose oblongated spine has been cut. They die either instantaneously, both respiration and circulation ceasing at once, or some few contractions of the extensors of the trunk and lower extremities are observed before; local hyperæmia is found nowhere, neither in the brain, nor lungs, nor heart.

As to crowing inspiration, it does not properly belong to the attack of laryngismus stridulus; its, and also the convulsive expirations are symptoms of returning reaction, that is, the recommencing of nervous and muscular functions. It is also met with in catarrh of the larynx, where the muscles of the vocal cords are spasmodically affected, and is, therefore, by no means a pathognomonic symptom of laryngismus.

This affection is mostly observed at the time of the first dentition, about the second half of the first year. I have often spoken of this period as one of general and rapid development of all the tissues and organs of the infantile body, and therefore I refer you to previous lectures. But I have here to direct your attention to the intrinsic similarity of this period of life with that of puberty, which also excels by its general rapid development. It is but natural that neuroses should be frequent in either, from this very physiological fact, and so they are, indeed. As in all cases of nervous diseases, however, all sorts of influences have been accused to be the causes of laryngismus: indigestion, cold, fright, morbid predispositions, ascarides, hypertrophy of the thymus gland, and every one of the imaginable affections of the pneumogastric and sympathetic nerves. And certainly dentition, the nightmare of both the public and many medical men. They may almost be excused by you on learning that even such men as Marshall Hall direct, in laryngismus, the gums to be incised, in different places and directions, once, twice, and even three times a day, and expect a cure from this sort of butchering art, or scientific butchery. I warn you most emphatically against following his advice to the extent in which it is given. In some cases incisions into the gums may be indicated, and I sometimes make them myself; but this readiness to operate on helpless children, who are so unfortunate as to "teethe," that is to say, to be from six to thirty months old, is, to say the least, a mistake. I shall avail myself of an opportunity to further give my views on the habit of "lancing the gums" in a more explicit manner, in my next lecture.

The large number of causes to which laryngismus has been attributed, and the various mistakes that have been made in the determination of its nature and character, have given rise to a number of names for this very same affection. Amongst them are foremost, besides laryngismus stridulus, apnœa of infants, thymic asthma, croup-like-inspiration, crowing inspiration, spasm of the glottis, paralysis of the glottis, suffocative asthma, stridulous angina, internal convulsion, and others. The difficulty in finding a correct interpretation of the symptoms, and even accurate names, has been so great, that the disease has become known by the name of "Kopp's asthma." Even this is incorrect; for Kopp, who wrote in 1830, has not been the first to give an exact description of the disease, moreover with an erroneous etiology, as he was preceded by Hamilton in 1818, John Clarke in 1815, and Alexander Hood in 1827.

Cider in Diabetes.—Drs. Miller and Holmes reported to the Berkshire District Medical Society a cure of Diabetes in a man seventy-two years of age, by the use of sweet cider, after the disease had lasted three years. Dr. T. Childs brought additional testimony to the cure of true diabetes mellitus by the use of cider.—*Berkshire Med. Journ.*

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from page* 118.)

It will be remembered that I stated my failure to find the cases referred to by my colleague, Dr. Jos. M. Smith, in which the diabetes had become complicated by the intercurrence of albuminuria. Dr. Smith has been so kind as to refer me to the page in Camplin's little book, where an observation similar to my own is recorded. I must have overlooked the statement, because it is dropped into a footnote. It runs thus (p. 13): "In this case the urine, which had been a long time in very large quantity, and contained only sugar as an abnormal ingredient, became albuminous towards the last, and increasingly so, as the fatal termination approached. A specimen examined a few days before death contained sugar, albumen, torulæ, and a few casts, and the specific gravity of that, if I recollect right, the last examined, was only 1·014, and it was as albuminous as in ordinary cases of albuminurea; the kidneys were found large, flabby, and congested, but with no decided marks of disease or degeneration."* Here, then, in the condition of the urine, is the almost exact parallel of the two cases I reported. Mine, then, have not the advantage of priority; but if I have lost the credit of having first called the attention of the profession to this modification of diabetes, I have gained in the confidence with which I may submit the facts to their scrutiny.

There is another subject regarding which I wish to say a few words, before I take up the topic which properly belongs to this evening. I refer to the impaired function of the kidneys, as shown by certain observations of M. De Beauvais, spoken of by Goodfellow (p. 50) in these words:—"Turpentine taken into the stomach, or inhaled by the lungs [or injected into the superficial tissues], gives rise to the odor of violets in the urine; and every one knows the offensive odor given off from the urine after eating asparagus. Bernard asserts (on the authority of De Beauvais) that in Bright's disease, these effects are not produced." In other words, it is the office of the kidney in health to eliminate from the blood something which has a violet odor in one case, and something which has a hippuric odor in the other, and it is asserted that neither of these offices, normal and healthy under the circumstances, can be performed in this disease, any more than the urea can be fully elimidated. During the last twenty days, I have put this statement to the test so far as my opportunities have permitted. I directed that twenty drops of turpentine should be given to five female patients, whose urine had been albuminous, and who had markedly enough the symptoms of Bright's disease. The first urine that was passed after taking the turpentine was reserved for my examination. The peculiar odor was present in four, and absent in one. On further examination of these specimens, it was ascertained that at that particular time only one contained albumen, and that was the one which did not give the violet odor. In other words, five patients were under treatment, having had albuminous urine, pale skin, œdema, and other symptoms of kidney disease; the albumen disappeared from the urine of four of them (to reappear no doubt at a later day), and while the albumen is absent, these four give, after taking turpentine, the same odor that the secretion of a healthy person would give; while in one of the number, the urine being still albuminous, this odor is not to be discovered. It seems probable, then, that it is not

* Had Dr. Camplin examined these kidneys with the microscope he would, in all probability, have found sufficiently "decided marks of disease or degeneration."

the existence of Bright's disease alone which prevents the elimination of this particular principle, but that state of the kidneys in Bright's disease which is attended by the separation of albumen from the blood.

The odor which asparagus gives to the urine was sought for in twelve patients, viz. in five at Bellevue, and in seven at St. Luke's Hospital. The five Bellevue patients were under the observation of Dr. Chandler, House Physician, who conducted the experiments for me. He gives the following details:—Case 1st, male. Urine was passed one hour after eating the asparagus, and immediately examined, but no odor of the asparagus was detected. The urine was albuminous at the time. Case 2d, male. Urine was voided in about an hour after taking the asparagus, and immediately examined. The peculiar odor was not detected. The urine was *not* albuminous at the time. These experiments were repeated after two days, with exactly the same results. Case 3d, male. Urine passed one hour after eating asparagus was albuminous, but had not the odor from the plant. Cases 4 and 5, males. Urine examined after the same interval, and in the same manner as in the previous cases. The peculiar odor was not detected, and the secretion was *not* albuminous. These last examinations were not repeated.

On the 1st of June, taking charge of the medical division of St. Luke's Hospital, I found seven among the patients who had Bright's disease. These were supplied with asparagus at the midday meal for several days, and the first urine passed after eating it was examined by Dr. Robt. Watts, Jr., House Physician, and myself, repeatedly. The odor of asparagus could never be detected in any, except in that of a woman in whom the affection was very chronic, and the symptoms almost wholly absent at the time of the examinations. In some of the cases, including the one just referred to, no albumen was then discovered, although it had previously been found in all.

The statement of De Beauvais is, therefore, substantially confirmed by these observations, at least so far as it relates to asparagus; and perhaps further examination may substantiate it as fully regarding the turpentine.

It will probably be found on further examination that kidneys in this affection are equally incapable of eliminating the few other odorous principles which are known to appear in the urine of healthy persons after the ingestion of other substances.

If we now turn to the causes of Bright's disease, I think we shall find, that beyond the knowledge of a very few facts, we are still oppressed by uncertainty and doubt. We have probably mastered most of the morbid manifestations that occur during life; and we have studied, with gratifying success, the conditions left after death by these morbid processes. Authors often write as if they were equally well informed regarding the etiology; but as I appreciate it, we know but little that is practical, very little that can aid us either in curing or preventing the disease. This is the true aim and utility of such knowledge.

I have already said the affection is often secondary, that is, it is caused by other diseases. In the greater number of instances adduced to illustrate this fact, we have seen that irritations of the branches of the great abdominal nervous system which are distributed to the intestines, pelvic organs, etc., can, slowly or promptly, according to the intensity of this irritation, induce renal derangement and disease. This may be effected either by a sort of reflex influence from the ganglionic centres, or through the countless anastomoses which bind the nerves of the abdominal, and I may add, thoracic cavities into one system. The condition of the renal nerves thus induced seems to be a paralysis rather than an excitation. From this we can follow the changes in the circulation and tissues of the kidneys to their completion with some degree of regularity.

We have seen that scarlet fever induces a disease which, in its anatomical and symptomatic relations, cannot be distinguished from the most common form of Bright's disease; differing from it, however, in its duration, severity, and curableness. In this exanthem we know of no special lesion of the nerves or nerve centres which can be reflected upon the kidney; and believing that the febrile, gastric, cerebral, and anginal commotions that attend it are excited, at least primarily, by a poisoned condition of the blood, we are naturally led to ascribe the renal changes to the same cause. Whether this poisoned blood acts directly on the kidneys to produce congestion, and the train of changes which follow, or whether the poison acts as medicinal doses of arsenic probably do, upon the nerves first, the congestion following as a secondary result, we may not be able positively to decide. Still, when we witness the nervous agitations which often attend scarlet fever, and take counsel of the few analogies that bear on this point, we shall hardly deny to innervation the intermediate and important office claimed in the latter of these hypotheses. In any view, we cannot reasonably doubt that this "sequela" of scarlet fever has its origin in an unnatural condition of the blood, or, to use a phrase often misapplied, but in this relation apposite, in blood poison.

(*To be Continued.*)

DIFFICULT OBSTETRICAL CASES.

By GEORGE T. ELLIOT, Jr., M.D.

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN BELLEVUE HOSPITAL MEDICAL COLLEGE, PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM, ETC.

(*Continued from* p. 88.)

CASE XCII.—*Post-partum Hæmorrhage.*

It is my conviction that there is no obstetric accident which can so readily be warded off as post-partum hæmorrhage; and that the burden of proof always rests on the attending physician in accounting for the accident. Very few men, so far as I have seen, thoroughly comprehend that nice manipulation of the uterus after labor which lightly and thoroughly secures co-ordinate contraction of the uterine fibres, avoiding unnecessary roughness and force on the one hand, and neglect on the other. Many men flatten a uterus against the spine, and many a bandage tightly applied over a folded towel has but this effect. It has often occurred to me to be obliged to remove one of these bandages for this reason, and thereby at once relieve the patient from unnecessary suffering and danger. The use of ergot as a prophylactic is also too often neglected.

Mrs. ——, a patient of mine, had a rapid and premature labor at between the seventh and eighth month with her fifth child. I reached the house after the labor was over. When Dr. —— came down stairs to turn the case over to me, I inquired whether he had given any ergot. He replied in the negative, when I begged him to order some before he left, as I did not wish to appear to order anything which he had omitted. He declined, and left, and on going immediately to the bedside I found the patient feeble, with the uterus above the umbilicus. I sent at once for Dr. Delafield, who was in the neighborhood, and having given her a large amount of brandy, turned out a quantity of clots from the uterus, and maintained thorough uterine contraction with ergot and manipulation. But the poor lady had a narrow escape, losing first sight and then consciousness. With the aid of brandy, position, and the expressed juice of beef, she rallied and did well. The child died some seven months after, from invagination of the intestine. The case is narrated as a type of what so often happens, and in the hope that it may aid in the promulgation of the great laws for preventing post-partum hæmorrhage, which have been so pre-eminently laid down by the Dublin Hospital School.

CASE XCIII.—*Convulsions.—Urine free from albumen.—Forceps.—Mother and child did well.*

Mrs. B.——, primipara, aged 22, fell in labor in the evening of November 19th, 1861. She had previously consulted me regarding her prospects, and I had made two examinations of the urine, which gave me a good specific gravity and no albumen. No microscopic exa-

mination made. She was robust, well built, healthy. Expression of face good, no puffiness. Some œdema of feet. Fingers somewhat swollen, rings removed. Bowels had been freely moved. I examined her on the 20th, and found the pelvis normal, os slightly open, soft parts not much relaxed, well ossified head presenting in the first position. Fœtal heart to the left side. Uterine souffle distinct over the umbilical and hypogastric regions. The pains continued during the day and night with moderate effect, dilatation of os steadily progressing, and its dilatability well marked. 21st, 9 A.M.—The membranes had now reached the floor of the pelvis, when they broke. At noon gave ℥s. tr. ergotæ, as but little advance was making. At half past two the pains were better, when suddenly she endeavored to raise herself in bed, turned partially to the right, and presented the well marked phenomenon of an epileptiform convulsion, biting her tongue. Gave chloroform immediately, and sent for a consultation. Dr. Thomas and Professor Gilman arrived within an hour, when Dr. T. took charge of the chloroform, and I delivered a living male child, weighing nine pounds, with the forceps. The frontal bone was depressed nearly half an inch below the parietal. The uterus contracted fairly, retaining the placenta entirely within it, and as the cord seemed very full of blood, it was cut just above the ligature, when a larger amount ran from it than any of the consultation remembered to have seen before, amounting according to our estimate to between four and five ounces. Drs. T. and G. now left, and I continued the influence of the chloroform. Some twenty minutes afterwards the placenta had not passed into the vagina, and the fundus uteri relaxed in a curious way without enlargement, giving to the hand the sensation of an extremely thin uterine wall, so I made a more careful examination and found the circular fibres lightly constricted, and the placenta retained as though in a bag with the mouth drawn. Deepening the chloroform, and dilating the cervix, I removed the placenta from the fundus, and after a good dose of ergot permanent contraction ensued. When the binder was on, the chloroform was discontinued, and consciousness returned, but the capillary congestion of the face, which was very marked, had not subsided, as it so generally does under chloroform. Pulse rather rapid and very feeble. Sent for Dr. Ross to apply wet cups to both temples, and had some ℥v. of blood taken. When the cups were first applied a violent convulsion followed, and this was the last. Tongue saved from being bitten.

26th.—Has done well. Bowels free, lochia good, milk secreted. Urine normal in amount, any little excitement controlled and anticipated by morphia. Dec. 1st.—Has suffered intensely for three days from periodic headache, best marked a little after noon. Quin. Sulphatis gr. x. 2d.—Ears ring, headache relieved. Continue moderate prophylactic doses. Feb. 10th, 1862.—Has done well, nurses her child. The protracted lochia have ceased. Uterus normal. Urine examined by Dr. W. H. Draper. Specific gravity 1009, not albuminous. Nothing under microscope but vesical epithelium. Has since continued well.

Case XCIV.—*Footling Presentation in a Case of Contracted Conjugate Diameter.—Fate of Child.—Mother attacked by Varioloid within the Week.—Did well.*

Mrs. —— was confined for the fifth time, Sept. 28th, 1861. See report of her former confinements in this Journal for March 2d, 1861, Case 39.

In labor fairly at 9 P.M. after fruitless pains for nearly two days. The os was then small and dilatable, membranes unruptured, right foot easily distinguishable. Fœtal heart most distinguishable just above the umbilicus. As the pains had not done much for her, and she complained of fatigue, I gave her forty drops of McMunn's elixir of opium and left. Scarcely had I done so before a violent pain came on with rupture of membranes. In about an hour I returned and found a foot just within the vulva. Thinking that the opium might slow the pains I gave a teaspoonful of the saturated tincture of ergot, but the pains did not slacken, and were strong and frequent. Everything advanced well, both legs and the breech were expelled naturally and without traction. Drew down a loop of cord, which pulsated in a satisfactory manner. Hoping now that, notwithstanding the deformity with which the previous labors had made me so familiar, the labor might be terminated with safety to the child, I placed the patient in the customary attitude for obstetric operations, with each leg confided to an assistant, and with my forceps at hand awaited the result. The left was the posterior arm, and when it came readily within reach, I simply finished disengaging it, no traction being necessary. During this time I kept two fingers of my right hand within the vagina, slightly pressing back the perineum, so that I might guard the cord from pressure below, and feel its pulsations, which continued to be good. Waiting thus for a pain I found that the right arm did not advance, and had to be disengaged from its position, as it was wedged between the head and the right linea ileo-pectinea. After doing this, as the pulsations of the cord were satisfactory and no struggle of the body for breath had occurred, I waited for another pain, and then readily delivered the head without instruments, and with no more than the customary scoop. Confiding the uterus to an assistant, and finding an excellent funic pulsation, I divided the cord, but to my surprise not the slightest effort at respiration took place. Hot and cold baths, slapping, sprinkling, insufflation, assiduous use of Marshall Hall's method, and the allowing of a half teaspoonful of blood to flow from the cord had no effect whatever, and not even a faint effort at respiration ever rewarded my labors, which were unremittingly kept up for forty minutes. All this time the heart continued to beat, though with gradually diminished force, and the pulsations persisted for a few minutes after my efforts were relinquished. The child weighed more than ten pounds, was well formed, free from evidences of injury, with a head quite small in proportion to its body.

The placenta came away readily, and the uterus contracted well. The mother was attacked with varioloid a few days afterwards, and seen in consultation by Dr. Catlin. She did well.

My experience has taught me to dread breech cases, but in this one, which presented no feature in the management which I could improve, *nec temere, nec timide*, the result was one bitter disappointment, and the refusal of a post-mortem another. Certainly there were none of the ordinary causes for death at work. The funis never faltered in its pulsations, the death struggle of the child when partially born, which it has been my lot to see so often, never occurred in this case, and it is not possible for me to account for the death without speculation. A clot on the medulla possibly; but why should this happen without evidences of pressure on the funis, or compression of the head, of which no traces appeared?

THE DISTINCTIONS
BETWEEN A VIRUS AND A POISON.

By W. H. THOMSON, M.D.,

MEDICAL REGISTRAR OF BELLEVUE HOSPITAL, AND STATE MEDICAL INSPECTOR.

[Read June 2d before the N. Y. County Medical Society, and published at its request.]

In taking a general view of human diseases, our attention will be arrested by certain very remarkable features, which characterize a large and important class. These features not only ally the different members of the class to each other, but separate them completely from every other order of morbid processes, and it needs but little further examination to perceive that they are not peculiarities only, but essential elements in these diseases, lying at the very basis of their pathology, and which they show by their extraordinary characters to belong to a wholly distinct order of causes. We would enumerate the more prominent mem-

bers of this class as comprising variola, scarlatina, diphtheria, rubeola, typhus fever, the plague, typhoid fever, cholera, hydrophobia, and pertussis. Yellow fever and erysipelas we would exclude for reasons we will state; while syphilis, with some of the identical features of the family, yet presents others which seem to refuse all relationship with any of its branches. For want of a better title, we have ventured to apply to them the term *virous*, although its Latin derivation implies a poison—the very idea of their nature against which we would protest, as confounding them with a class of agents with which they have hardly anything in common.

In the first place, we are met with the important fact that not one of them are we able to trace, as we can other maladies, to disordered functions of the body, but they are always themselves their own cause. In other words, they are invariably invaders from without; and the human frame can, by no process of its own, normal or abnormal, give origin to them, any more than it can give origin to vegetables or animals. We may go still further and say, that as the living body cannot first generate them, however it may *reproduce* them, neither can any conceivable composition or decomposition of solids, fluids, or gases, be their beginning; for of this truth we have a demonstration no one would gainsay, were it not that some medical theorists have a way of stalking to their conclusions, with a most irresistible contempt for facts. A very few general causes, which have always existed, are made the direct sources of numerous most specific diseases, which have every one of them historic beginnings. In other words, in many countries their origin we know to have been an *importation*, a definite chronological event, and one of the exchanges of commerce or conquest; so that instead of arising from some unlucky mingling of physical elements, they date invariably from a mingling of human beings. The nations of Europe for ages knew no more of scarlatina or small-pox than they did of tobacco or gunpowder, while, on the contrary, the like of pneumonias and rheumatisms—true functional disorders from elemental causes—have been the lot of man ever since Paradise was lost. Their commercial, rather than chemical origin, as well as their first route of travel, is sometimes curiously indicated by their names, for as the names Damask, Calico, and Cologne, preserve the origin of what are now world-wide manufactures, so we speak of a man in Ohio dying of *Asiatic* cholera. This great fact is often strangely ignored by writers who persist in ascribing these modern diseases to causes more ancient than any human tradition; but were it kept more steadily in view, we would no more hear of Irish filth creating typhoid fever, than of Irish soil spontaneously generating potatoes, however luxuriantly both are found in our day to develop about the shanty. No one questions, notwithstanding their disastrous multiplication, that southern acres did not give birth to negroes before 1630; and in the same way precisely, small-pox, measles, and this whole tribe, originated in America, not from dunghills or cesspools, but from *ships*.

That these diseases, which fill the grave with numbers greater than does any other array of our destroyers, and which ever strike down those who are yet far from the natural measure of their days, should have attracted the greatest attention, was inevitable. But we have wondered why it is, that their many wholly peculiar and distinctive characters have served so little with nosologists in forming their classification, or a consistent theory of their pathology. At present, they are generally arranged in text books, according to the more prominent symptoms to which their operation in the system gives rise. Thus, most of them are classed under the head of fevers, some under skin diseases, while hooping-cough and hydrophobia are made to keep company with asthma or hysteria. But if rubeola, for example, is to be classed with malaria, because both give rise to fever, why should not gunshot wounds be joined with them?

But in our view, the pathology of these diseases has been most confused by accepting a few imperfect analogies as indicating a relationship between virous diseases and poisons. First, viruses are classed with poisons, because both come from without the system, and are on that account true morbific agents, operating simply because they have gained entrance, and therefore, generally speaking, it matters little whether they have got into a healthy or unhealthy system. Variola and morphia, the bite of a mad dog and the bite of a rattlesnake, produce results equally disastrous in a prize-fighter as in a consumptive. Both also resemble one another in causing a wonderful disturbance from small beginnings. But perhaps the most effective consideration has been, that the two are equally mysterious, and it follows practically that we must seek the antidote to a virus, or failing in that, must promote its *elimination*, like that of other poisons, by the great emunctory organs.

But let us recal what essentially constitutes a Poison, and apply its well known rules to the equally known characters of viruses, and see how they will harmonize. We begin with the broad fact, that though some, as the vegetable and animal poisons, are organic *products*, yet they are themselves never anything but chemical or physical agents, and purely physical conditions are required for their action, and nothing else. Thus the first law of a poison is, that whether mineral, vegetable, or animal—either a grain of arsenic, of strychnia, or a drop of venom—it needs but a twinkling after it is fairly swimming in the blood current, before the man is poisoned. Whatever the delay, that has not been in action, but in *absorption*; and all its symptoms, whether trivial or fatal, have nothing to do with *time*, when once these agents have reached their destination, any more or less than has the thrust of a bayonet. We have but to instance how the action of arsenic, strychnia, aconite, snake bites, etc., can be delayed or suspended, by a ligature about a limb in which they have been injected, to establish this analogy with simple physical laws. But secondly, if time is not an element in poisoning, *quantity* is, and the operation is directly proportioned to the *amount* introduced. Thus in all cases, no matter how powerful or concentrated the agent, it must be an appreciable and definite quantity to produce a given set of symptoms; so that, for instance, one amount will kill, a less amount will make the patient very sick, a still less quantity will make him less sick, and smaller doses yet are often medicinal. Thirdly, a poison has no variations either of manner, time, or place, in its action, in this also preserving analogies with physical agents. Strychnine of a mild *type*, or a year in which serpents are twice as venomous as in the previous year, or tartar emetic which will vomit only in certain latitudes, are absurdities. Again, as a physical agent, like a bullet for example, kills by its passage, in the same way precisely acts a poison like prussic acid; that is, prussic acid is no more generated in the body which it is fearfully destroying, than are bullets. Lastly, the operation of poisons once over, they leave no *specific* life impress on the system, which rids itself of them the same way that it rids itself of urea or carbonic acid; and should the patient, the following week, get the same dose, he will repeat the same experience, and so on, *usque ad finem*.

Surely we have only to state the essentials of a poison, to feel that at every step we are departing from a virus! Thus at the outset, in irreconcilable contrast with the necessarily immediate action of poisons, we meet in viruses with the significant fact that *their* morbid symptoms are *never* immediate, but on the contrary (and this also is no less important), they require not only a prolonged but a *definite* lapse of time, each particular virus having its own term of development, with the same kind of regularity that accompanies the different stages of vegetable life. It is difficult to find in chemical or physical processes, even the approximation to a principle which will explain this remarkable phenomenon in virous diseases, and therefore pathologists (without often recognising the legitimate bearing of the name) have been obliged to borrow for it a term proper

only to the living organic kingdom, namely, *incubation*. We think the choice unfortunate, for it implies in viruses an *animal* life, with which they have but very few analogies, and would much prefer it had been *germination*. Like other servants, words not seldom make a servant of their employer, the mind, and we have suspected that this word, incubation, may have caused the true nature of viruses to be missed, by its directing the mind on the wrong scent, namely, that virous diseases were owing to a vast hatching of little *animals*. A diligent search has therefore been made for the small-pox animalcula, but because neither in that disease nor its congeners have any such things been found, the analogy with organic life in the invariable phenomena of incubation, besides many others no less strong, has been surrendered, the general view reverting to the old idea of a poison.

But what tangible poison is there, which must traverse the circulation some millions of times, for nine, fourteen, or thirty days, before it can act at all? The poison advocate *must* eliminate this troublesome fact before he can harmonize his reflections. But long ere his mental processes have brought this about, he will encounter a series of incompatibles, beginning with one which is even worse than incubation, namely this: Does he, when securing the entrance of a particle of arsenic or other poison, not only expect to wait two weeks before he sees anything more of it, but also expect that his patient will, at the end of that time, have almost turned into arsenic himself, reproducing enough of it to poison all New York? The historian Robertson states that one negro, landed on the coast of Mexico, with a few variola pustules, destroyed three million and a half of people, within a wonderfully short time. Now who thinks of including in the same division of nature, a grain of sand and a grain of mustard seed? There is a transcendent difference between these two. For the grain of sand must remain a grain of sand for ever, but the other grain beside it, begins to go through a series of extraordinary changes—definite, however, in succession, time, and result, which last is, mustard seeds innumerable. Give the original grain infinite opportunities, and it will show it has infinite capacity for such opportunities, and could fill the fixed stars with mustard. But precisely this difference confronts us between a particle of arsenic and a particle of variola crust, and yet shall we consider them like agents to be named alike?

It has been well said that the sublime narrative with which the Bible opens, does not adduce a manifestation of Infinite Power nearly so wonderful as when it represents the Omnipotent giving to the first seed its mysterious principle while the earth stands. Life and Death are wonders, because all physical Nature cannot tell of them a word, but Reproduction of Like from Like is a greater, to which the lesser two owe their very existence; for, without it, physical Nature would soon have the world to itself once more. When we are confronted, therefore, with this great principle, which the profound old Egyptian thought it unlawful to name, we feel at once that we are at an infinite distance from crystallization, cohesion, oxidation, affinity, and all such forces. But it is indisputable that this principle is a leading element in Viruses, for it occurs in them to an amazing degree, and observing closely its invariable law of sequence, to a definite series of changes, occupying definite periods of time, regulated by the articular virus.

For the more we examine these two characters, Incubation and Reproduction (and the no less important one that intervenes—Development or Growth), the surer grows the conviction, not only that they are unmistakably allied to *organic* phenomena alone, but that they settle the whole pathology of these diseases, because they are the only reasons that these diseases are diseases at all. If a drop of variola lymph cannot be reproduced in a man, then he need fear it as little as a drop of molasses. A virus, therefore, is nothing without reproduction.

But reproduction quickly brings up another great feature of viruses; for reproduction necessarily involves propagation, and these diseases must, therefore, from their very nature be *Communicable*. We prefer this word to Contagion, for this latter unfortunate term somehow stirs up some medical minds to fierce hostility to anything with which it has any connexion. But no one surely will deny that Virous diseases are "communicable" if not "contagious," and they are so, because reproduction involves propagation wherever the conditions of the reproducing life are to be found, and viruses find their conditions in animal bodies, and on that account spread from body to body. There is nothing, therefore, inexplicable in this character of Viruses, unless we think of them as *poisons* whose laws are physical. But how can a Virus be a Poison, if it can have no existence without these three elements, incubation, reproduction, propagation, when it is absolutely absurd to talk of a poison, for instance aconite, having either of them in the remotest degree?

(*To be Continued.*)

Reports of Hospitals.

NEW YORK HOSPITAL.

[Reported by JOHN T. KENNEDY, M.D., Acting House Surgeon.]

(*Continued from page* 121.)

SUICIDAL WOUND OF THROAT.—GUNSHOT WOUND OF SHOULDER. EXPOSURE OF AXILLARY ARTERY.

CASE IV.—*Incised Wound of Throat.*—Abby Connor, 28, Ireland, married, admitted June 10, 1862 (Dr. Parker).—Patient states that immediately previous to admission, being somewhat delirious, she cut her throat with a razor. On admission she was in a state of great prostration, although the hæmorrhage has not been profuse. Pulse at the wrist scarcely perceptible; surface cold. On examination she is found to have an incised wound of the throat, transverse, six inches in length on level with upper margin of thyroid cartilage, and opening into the trachea. The œsophagus is injured. No important bloodvessel is wounded, and patient is able to articulate. Sutures were applied, and cold-water dressing. The cut surfaces united without trouble, and the patient was discharged cured on the 11th day of July.

CASE V.—*Gunshot Wound of Shoulder—Exposure of Axillary Artery, and Recovery without Ligature.*—Miles S. Adams, 30, N. Y., Co. A, 3d Michigan Regt., admitted June 8, 1862 (Dr. Parker). Patient states that eight days previous to admission he was wounded by a ball at the battle of Seven Pines. On examination, it is found that the ball entered the anterior aspect of the right shoulder, just below the coracoid process, and came out about three inches below on the posterior aspect of the arm. The track of the wound is still open and secretes a large amount of pus, but there is not much tendency to burrowing. Through the upper wound the axillary artery could be seen pulsating and bare. This fact gave rise to a good deal of anxiety and watchfulness, as it was thought the artery would have to be ligated above in order to guard against sudden and fatal secondary hæmorrhage. But the wound filled up with granulations, and everything progressed towards a favorable recovery.

SOLDIERS' HOME.

(Dr. A. B. MOTT, Attending Surgeon—A. E. M. PURDY, M.D., House-Surgeon.)

AMPUTATIONS OF SHOULDER.—DIPHTHERIA.

CASE I.—*Gunshot Wound of Shoulder—Amputation; Recovery.*—William Cockefair, private, Co. I, 9th Reg't N. Y. Vol., Hawkins Zouaves, wounded at the battle of Camden, April 19, 1862, by a musket-ball in the left shoulder, posteriorly about an inch and a half below the acromion process of the scapula. The wound was received whilst he was lying on his abdomen, where he had just dropped to avoid a shower of grape and canister. He was able to rise immediately, take his musket, and walk to the field

hospital, which was placed about two hundred yards in the rear. There was not much hæmorrhage. Two days after the action he was anæsthetized and the wound probed, but no ball was found. From the time he received the wound he was unable to use the injured arm, and suffered continuous pain: cold water, only, was used as a dressing. On the 4th of May, he was placed upon the hospital transport Eastern Queen, and arrived at this hospital on the 9th of May. Upon entering, the arm was firmly flexed and sluug forward on the abdomen; pulse accelerated, and the wound discharging a fœtid and unhealthy pus. The patient continued to suffer intense pain, so that anodynes had to be freely used; and as he was failing, a consultation was held on the 17th of May. The patient being etherized, the opening was enlarged to admit the finger, when it was found the head of the bone was greatly shattered; so much so, that amputation was deemed advisable. The arm was, therefore, amputated at the shoulder-joint on the 18th May, by Dr. Alex. B. Mott, surgeon in charge, assisted by Dr. John J. Crane.

The operation chosen was the double flap, that of Lisfranc, the one now generally adopted. There was little or no hæmorrhage, and the patient rallied well. The day following the operation, the wound discharged a large quantity of pus, and continued doing so for some time. The patient's appetite immediately improved and his strength proportionately, so that on the 15th day after amputation, he was able to walk about the ward, and on the 21st day walk out. The arm was dressed throughout entirely with dry lint. The ligatures all came away on the 10th day.

Case II.—*Gunshot Wound of Shoulder; Amputation, Death.*—Cornelius Regan, private, Co. G, 37th Regiment N. Y. Vol., was wounded at the battle of Williamsburg, May 5, 1862. The ball entered anteriorly a little below the acromion process of the scapula, emerging posteriorly at the spine of scapula, causing considerable hæmorrhage. The wound progressed favorably for a short time, but upon entrance into this hospital, May 14th, there were symptoms of necrosis, and a few days after two large pieces of bone were extracted. Upon an examination of the wound not only was the head of the humerus shattered, but the acromion process and spine of the scapula were both fractured. On the 6th day after admission, symptoms of pyæmia began to show themselves, violent chills, three or four times daily, followed by profuse perspiration. Quinine with an excess of the acid gave some relief, but the wound discharged a very unhealthy pus and his strength continued gradually to lessen, until at length, after a careful examination, amputation was considered the only avenue towards recovery. Amputation at the shoulder-joint was performed on the 31st of May, by Dr. Alex. B. Mott, surgeon in charge, assisted by Dr. John J. Crane. The same method was adopted as in the former case. The operation was completed about 6 P.M., and the flaps filled with an ice-cold sponge. Considerable blood was lost during the operation, because of the difficulty in tying the ligatures, the surrounding tissues being in a very diseased condition. At 10 P.M. the lips of the wound were brought together with interrupted sutures and adhesive straps; stimulants were freely given and cold being applied, the patient was left for the night. In about half an hour, word came the patient had bled to death, and upon reaching him the bed and floor were found saturated with blood. The wound was immediately opened and an effort made to ligate the bleeding vessel, which was found to be the anterior scapular artery, but the ligature had torn away so high up, that it was impossible to reach it. By this time the patient was moribund, and died at 3 A.M., July 1st.

Case III.—*Diphtheria—Death—Autopsy.*—Alden L. Page, musician, Co. E, 2d Reg't Maine Vol., admitted June 25th, 1862, suffering from chronic rheumatism, not having been able to do duty since the battle of Bull Run. About four days after his entrance he began to complain of sore throat, pain upon deglutition. The pulse at this time was natural. The next day the throat becoming more painful, an examination was made, when diphtheritic patches were seen upon the tonsils, palate, and posterior fauces.

He was immediately put upon the tonic and stimulating treatment—Quinine gr. iij. every three hours; potassæ chlorat. ʒ ij to aq. ℥ iv; ʒ ij. every fifteen minutes, both as a gargle and internally, and stimulant to the amount of twelve ounces of whiskey daily. The pulse was now about 100 per minute, the respiration was slower, and his countenance assumed a very anxious look, with deglutition still more painful. The treatment was continued, and the stimulants increased to 14 oz., but all to no purpose, as the exudation continued to increase, and respiration was performed with the greatest difficulty. The last forty-eight hours there was complete aphonia and a flapping sound upon expiration and inspiration, as if the membrane were loose in the trachea. At this time the exudation covered the tonsils and palate, and seemed to extend far down into the air passage.

It should be mentioned, there were in the same ward with this patient thirty-four others, suffering from miasmatic fever, chronic diarrhœa, etc. The question very naturally arose concerning contagion, and it was determined to let him remain, care being taken to thoroughly cleanse all articles in use. Respiration now became very labored, and it was with the greatest difficulty he breathed at all; his sufferings were intense. His countenance assumed a still more anxious appearance, and symptoms of asphyxia now began to be noticed. At length he gradually sank away, dying on the evening of the fifth day after the commencement of the disease.

Autopsy, Twelve Hours after Death.—An incision was made in the course of the trachea, and the fauces and trachea down to its bifurcation with the bronchi were removed. Upon laying it open, a membrane of one-sixteenth of an inch in thickness was found to cover the entire inner surface of the air passages, extending down into the third ramification of the bronchi.

Progress of Medical Science.

EFFECTS OF THE FUNGI OF WHEAT IN THE PRODUCTION OF MEASLES.

Dr. J. H. Salisbury, of Newark, Ohio, has contributed a very interesting paper on the connexion of measles with the inhalation of the spores and cells of wheat straw. After some general remarks on the character of vegetable fungi, he relates the following case:—

"Hon. J. Dille, of Newark, Ohio, came to my office on the evening of the 9th of December last, and stated that he was just recovering from what he believed to be an attack of measles. It was his opinion he had caught them from pitching straw from an old stack. He stated that on December 4th he pitched from an old stack a load of straw, and unloaded it in his stable. Portions of the stack had become partially decayed, and were already steaming with the heat of incipient decomposition. In pitching over and picking out the best straw the air became filled with a fine dust, which he freely inhaled. The dust tasted and had the odor of old straw. This took place during the forenoon. His throat soon began to feel dry and irritated. When he returned to dinner, he could still taste and smell the old straw. This taste and smell he could not get rid of. During the following night he awoke with a very sore throat, which became much worse by morning. After getting up and dressing he was taken with a severe chill, with pains in the head and back, and felt so sick and prostrated that he was compelled to return to bed again, where he remained through the day. The chill was followed by a high fever and severe pains in the head, so much so that a portion of the time he was delirious. He felt a heavy congested feeling about the chest, his throat

and fauces were swollen and inflamed, with severe catarrhal symptoms. An eruption like that of measles appeared on his face and neck, and the *old straw* taste still continued. His fever continued high through the following (Thursday) night, with severe pains in the head.

"Friday, December 6th, he felt much better, and was able to be up around the house. The fever and catarrhal symptoms had partially subsided. His eyes were sensitive, watery, and inflamed.

"Saturday, December 7th, felt much better. The eruption had passed downwards over the whole body, and had begun to disappear from the face. He rapidly recovered, so that on Monday, December 9th, he was moving about the streets. In the evening of the 9th he called at my office. His eyes were still red, inflamed, and sensitive; throat sore, dry, and voice hoarse, and had a heavy congested feeling still about the chest. The blotches on his face could be faintly distinguished. He stated that he could still taste the old straw in his throat."

On the same day (Dec. 4th) that Mr. Dille exposed himself to the straw dust, the measles first made its appearance in the military camp at Newark. It is interesting in that connexion to take into account the following facts:—From the 23d to the 30th the weather was cool and damp, with considerable rain and snow. On the 1st of December snow fell to the depth of an inch; on the 2d inst. the weather became quite warm, and the snow melted. Again the bedticks for the soldiers to sleep upon were stuffed with straw and near a fire. Here were present all the conditions requisite for the formation of mould upon the straw, viz. organic decomposition, heat, and moisture, and here were also visible the effects of the exposure of the men to such influences—nor could the disease be traced to any other source. The men came from different parts of the country, and had neither been exposed previous to enlistment, nor afterwards, to the contagious influence of the disease.

On the first day of the appearance of the fever there were eight cases, and within a week after there were forty. The disease then disappeared for ten or twelve days from its first appearance. Between the fourteenth and fifteenth day the disease again appeared, due no doubt to the exposure to contagion. Dr. Salisbury asserts that in almost every instance where camp measles exists the beds of the soldiers will be found filled with straw. As further illustrating the effects of the inhalation of the dust of wheat straw, several farmers stated at a recent meeting of the "Farmers' Club" in that place, that it was very common after threshing wheat for persons to be taken with severe chills, followed by a high fever, catarrhal symptoms, and an eruption upon the face.

With these observations before him, Dr. S. deemed the subject one for further investigation, and accordingly procured the fungous growths of wheat, and the dust rising from them when agitated, for microscopical examination. The straw used for this purpose was taken from the camp beds, from Mr. Dille's stable, and from stacks in the field. The mould consisted of cells, spores, and sporangia, each element existing in greater or less quantity according to the amount of decomposition which the straw had undergone. He then took clean white straw, free from fungi, packed it firmly in a small wooden box, wet it with a small amount of cold well-water, and placed it with the lid firmly secured near the stove in his office, subjected to a temperature of from 60° to 75° Fahr. Twenty-four hours after, the box was opened, and the centre of the straw was found covered with a mould, and when the mass was agitated a fine dust of spores and cells was disengaged. This, when inhaled, had the odor and taste of old straw. Again the straw was moistened and subjected to the same influences for forty-eight hours, with the effect of increasing the formation of the fungi, and rendering the proportion of sporangia greater. The doctor then conceived the idea of inoculating himself, and makes the following statement of its effects:—

"At 10 o'clock P.M., Feb. 11th, 1862, I inoculated my arm with the spores and cells of the fungi of wheat straw, which I obtained by placing a straw—covered with the plants—on a plate of glass and hitting it with a few slight taps. On removing the straw, under and both sides of it was a white cloudy band, about one-third of an inch wide, running across the glass. These spores and cells lay so thick on the glass, that, to the naked eye, they seemed to touch each other. The straw from which I obtained these cells came from a stack near this place, and was the same kind of straw as that used for beds at the camp. Under the microscope the fungi presented the same appearance, and the cells disengaged in agitating the straw were precisely similar.

"Wednesday, Feb. 12th, perfectly well. No inflammation or itching around the point of inoculation.

"13th. Slight nausea. A very slight redness and itching at inoculating point.

"14th. Got up with a feeling of lassitude and nausea, which continued all day. The redness and itching of inoculating wound increasing; had difficulty in keeping warm; chilly all day; occasional sneezing; eyes sensitive; had a peculiar feeling about the scalp, as if red pepper or mustard had been rubbed into the pores.

"Saturday, Feb. 15.—Nausea and lassitude continue; occasional sneezing; flashes of heat over the whole body; itching and inflammation of the wound on the arm increasing; thoughtlessly rubbed off the scab, which was about three lines in diameter. The peculiar smarting, burning, congested sensation over the whole scalp, has increased since yesterday. It extends into the bone, with pains through the forehead and temples. A few blotches have made their appearance on the face and neck. Eyes weak and inflamed, so much so that I could not use them to read over half an hour during the evening. A heavy oppressive feeling about the chest; mucous membrane of fauces and throat dry and irritated; feel as if I had a cold.

"Sunday, Feb. 16.—Had a sensation of weariness and drowsiness, with nausea, all day. Eyes red, inflamed, and sensitive; smart, so that I cannot use them to read by gaslight. Whole scalp feels sore, with a constant, congested, burning sensation all through it to the bone. Arm itches; redness as large as a dime. A heavy congested feeling about the chest; have had more or less fever since Saturday morning. Throat and fauces dry and swollen, and voice hoarse. Pains in back and head have been almost constant since Friday last.

"Monday, Feb. 17.—The burning sensation of the scalp still continues. Eyes weak and inflamed; cannot use them long at a time, without pain. There is still slight fever and nausea.

"Tuesday, Feb. 18.—Nausea; face feels as if it had been exposed to the heat of an open fire till it had become inflamed. The peculiar burning soreness of the scalp is somewhat relieved. Eyes still sensitive; catarrhal symptoms and fever less than yesterday.

"Wednesday, Feb. 19.—Very much better; the soreness of scalp almost entirely relieved; blotches and redness of face disappeared; catarrhal symptoms and fever gone; eyes quite well."

A second inoculation of himself on the evening of the day of recovery produced no effect save a slight sensitiveness of the eyes. Next his wife was inoculated, and substantially the same constitutional symptoms were produced. He next inoculated a healthy boy, six years of age, who had been exposed to measles by contact with the disease. The fungi were grown in the office, and were introduced under the skin seventy-two hours after exposure. On the second day, there was redness of the skin about the size of a dime. This was preceded and accompanied by slight catarrhal symptoms. These subsided without any bad effects. In the course of ten days he was perfectly well, and at the time of reporting the case forty-two days had passed, and no signs of measles had yet made their appearance. This

procedure was adopted in thirteen similar cases with like results.

The inoculation produces a simple measle blotch around the wound, and is only attended with a slight itching sensation. Dr. S. makes the following remarks in conclusion:—

"I have not been able to distinguish thus far any difference between the eruption and attendant symptoms of genuine measles and 'camp measles,' or straw measles. When the disease is communicated to the human subject, however, by inhaling the spores and cells of straw fungi, the eruption appears to follow the exposure or inhalation in from twenty-four to ninety-six hours; while in exposures to the contagion of the disease, the eruption does not usually make its appearance until from eleven to fourteen days thereafter. It is stated that in inoculations made by using matter obtained from the measle blotch, or by using the tears, blood, or salivary secretions of subjects broken out with the disease, the modified type of measles which results, makes its appearance generally on the sixth or seventh day after the inoculation. In inoculating, however, with the spores and cells of straw fungi, the symptoms commence usually in about twenty-four hours; though sometimes they do not make their appearance till as late as seventy-two hours thereafter.

"This matter, however, requires further investigation before fully reliable statements can be made.

"To what extent inoculation with straw fungi may prove effectual in protecting the human system against the contagion of measles, can only be settled by careful and extended experiments."

American Medical Times.

SATURDAY, SEPTEMBER 6, 1862.

VOLUNTEER SURGICAL AID.

During the progress of this sanguinary war the medical profession in civil life has frequently been called upon for aid in times of great emergency. Commencing with the battle of Bull Run, there has scarcely been a clash of arms which has not summoned practitioners from their private pursuits to the temporary aid of their brethren of the army. The battle-fields of Fort Donelson, Pittsburgh Landing, and others in the West, drew largely upon the profession of the western States. So, also, throughout the entire campaign of the Peninsula, the medical profession of the northern and eastern States contributed largely in aid of the medical service of the army. And that aid has always been cheerfully and promptly given, though gratuitous, and often at a great personal sacrifice. Many of the oldest and most reputable surgeons engaged in large business have responded to the call, and given their time and services to the country. In this generous devotion to the public interest and the welfare of the suffering soldiers, the medical profession acts with characteristic patriotism and humanity. But these acts of self-sacrifice, like the gentle ministrations of charity, are unseen and unacknowledged, except by the recipients of the benefactions. They are, however, none the less important, and will some day largely swell the sum-total of the people's patriotic services.

Another appeal for voluntary aid has come from the battle-field to the medical profession, and the response has been equal to the demand. If a thousand surgeons did not arrive at Washington within thirty-six hours of the issuing of the call, as reported, a sufficiently large number assembled, according to the announcement of the Surgeon-General, to meet the wants of the service. Such generous enthusiasm should find its appropriate reward in large opportunities to succor the wounded, and in multiplied methods of relieving human suffering. But it is an important question how far the voluntary services of the profession are, under these circumstances, made available; in other words, is there not a large amount of misdirected effort on the part of volunteer surgeons which a well digested system would render useful?

The answer to this inquiry will appear, if we consider the nature of the duties which they are called upon to perform, the qualifications requisite to their proper performance, and the class of persons who respond to the call of Government. The service required of the medical staff on the battle-field is entirely surgical; and the exigencies of that service require the highest order of talent and the largest experience for its proper performance. The surgeon has to determine some of the nicest questions in surgery under circumstances the most difficult and perplexing. On his decisions, thus hastily formed, rests the safety of the patient's limbs, and often his life. Knowledge and experience, alone, can give him the proper qualification for this duty. Again, operative surgery enters largely into the duties of the surgeon on the field. Here experience is of the utmost importance to a proper discharge of duty. The surgeon is required to select the best operation for the case in hand, and to perform it with dexterity. There is no time to be lost in the manual part, but with the utmost dispatch the operation should be completed, the wound dressed, and the patient removed. To accomplish these objects properly, nothing but practical familiarity with the manual exercise of the operative surgeon can suffice. It is evident, therefore, that the duties required of those who go to the field to aid the medical staff of the army during or immediately after a great battle, are of the highest surgical importance; and that for their proper performance the highest surgical ability and experience are requisite.

But it must be admitted that the class of persons who volunteer for such service are not always, if, indeed, they are in a majority of instances, qualified to discharge the duties which we have briefly noticed. Large numbers of practitioners, influenced by patriotic and humane feelings, but who have no knowledge of surgery or practical experience, obey the summons. Others from mere curiosity accept the gratuitous transportation of Government, and heedlessly seek the scene of conflict. Still others, who are aspirants for surgical distinction, but who have never had an opportunity for practice, especially in operative surgery, rush frantically to the battle-field as the great theatre where they may operate without stint or hindrance. On every field where a sanguinary battle has been fought these different classes of volunteers have been found, and the results which have followed have been deplorable. The unnecessary sacrifice of limbs, the failure to perform proper and necessary operations, and the injury needlessly inflicted in the search for missiles, are the legitimate results of the labors of such incompetent surgeons.

A new campaign has commenced, which promises to be more sanguinary than the last; and among the errors of the past which we desire to see corrected is that of volunteer surgical assistance. That surgeons in civil practice will be

frequently required to aid their brethren of the army in great emergencies, there can be no doubt. Nor can there be a doubt that by a proper system the best surgical talent of the country can be commanded and rendered available at the moment when there is the greatest necessity. An organization which would most perfectly accomplish this purpose would recognise in every state certain surgeons, whom the Surgeon-General should be authorized to call into the service at his discretion. Such surgeons should select three, four, or five assistants, who should always accompany them to the scene of action. A single qualified surgeon, with ample assistance, would thus accomplish more and to a better purpose, than a score of men gathered up without regard to their qualifications.

THE WEEK.

The British Medical Association, an organization not unlike the American Medical Association, publishes a medical periodical, which is furnished gratuitously to the members who pay their annual dues. The income of the society is about $14,000, and the cost of the journal about $13,500. The periodical, the *British Medical Journal*, is very ably conducted, but, nevertheless, ever since its establishment it has been a source of discord. The association had, during the first years of its existence, published an annual volume of *Transactions*, which formed one of the best serial publications emanating from the British professions. We desire to call the attention of those members of the American Medical Association, who have encouraged the establishment of an organ of that body, to this example of a large society expending a sum of money which would issue half a dozen volumes of the size of the American *Transactions*, upon a journal which tends rather to alienate than unite its members. The inevitable result of such diversion of its funds and purposes would be the ultimate destruction of the Association.

—

Europe has had a large number of voluntary Congresses during the past year, and two still remain to be held, viz:—The British Association at Cambridge, and the International Association for the Promotion of Social Science, at Brussels. At the latter the following questions are proposed for discussion in the Section on Public Health.

"1. Does not the improper and insufficient diet of the working classes contribute to the increase of pulmonary consumption?—remedies for this evil. 2. Drainage as a sanitary measure, particularly amongst dense populations—can it altogether extirpate endemic diseases? 3. Scrofulousness of children in foundling and orphan hospitals—ought not country and maritime situations, which are less subject to scrofula, to be selected for such establishments? should not general orphan hospitals be founded on the plan of the reformatory schools at Beernem and Ruysselede? 4. Danger in consanguineous marriages—should the legislative prohibitions of them be extended?"

—

At the recent meeting of the *British Medical Association*, Dr. Cutler, of Mass., introduced the American method of applying extension in the treatment of morbus coxarius. He described Dr. Davis's and Dr. Sayre's splints, but did not exhibit them, as he had no authority from the inventors. It is to be regretted that Dr. C. did not more thoroughly develop, with the aid of the instruments, this plan of treating hip-diseases. As yet this disease is treated, in France and England, by the old methods.

A large number of medical gentlemen left this city on Saturday evening, in obedience to a call from the Secretary of War upon Mayor Opdyke for surgical assistance. We learn that they have organized into a working body numbering forty, with Drs. Detmold, Stone, and Halstead as an executive committee, and have been assigned to the Capitol building and grounds, where beds have been arranged.

Reviews.

Transactions of the Medical Society of the State of New York, for the year 1862. Pp. 567.

The present volume of *Transactions* is, in many respects, the most creditable yet issued. The papers are in general more elaborate and more thoroughly finished than usual. The typography is excellent, and the freedom of the text from errors will impress every one who is accustomed to examine critically this annual volume. For the good appearance of the *Transactions*, as well as for one of its most interesting papers, the Society is under lasting obligations to its indefatigable Secretary, Dr. Sylvester D. Willard, of Albany. We can but commend the unwearied patience of Dr. Willard, and his generous devotion to the interests of the Society. He has for several years gratuitously edited the *Transactions*, and by perseverance gradually brought them from a thin and execrably printed pamphlet, to the present large and elegant volume. Many of the papers have already appeared in pamphlet form, and have been noticed in our columns. The remainder are for the most part well written, and creditable to their authors. We shall notice some of them more at length hereafter.

A Descriptive List of the Microscopical Specimens illustrating Seven Lectures on the Structure and Growth of Tissues, etc. By Lionel S. Beale, M.D., F.R.S. April—May, 1861. London: Churchill, 1861, pp. 16.

This pamphlet contains, as its title indicates, several colored plates, and a descriptive list of the microscopical specimens illustrating the author's lectures.

Small-Pox amongst Sheep.—At Allington, in Hampshire, about six weeks since, a disease of a most virulent character appeared among the flocks of Mr. Parry, and spread with fearful rapidity. The first symptoms of the disease were, a staggering gait, slight fever, and swollen eyelids; red spots subsequently appeared over the whole body; these assumed the character of the pustules of ordinary small-pox, followed by malignant ulceration, which emitted a thin offensive matter. The mortality was truly frightful. Diligent inquiry failed to elicit the cause of the outbreak; it was found impossible to trace it to contagion. No one in the locality had ever witnessed a disease of this type, and Mr. Parry, in his dilemma, applied to Professor Simonds, of the Royal Veterinary College. This gentleman immediately pronounced the disease to be small-pox, and, with his accustomed energy, set to work to arrest its ravages. On Saturday last he completed his inoculation of the lambs, originally 700 in number, having a few days previously inoculated the ewes, which amounted, at the time the disease showed itself, to 1000. We are happy to say that the mortality is already much upon the decrease, and we shall look forward with great interest to the ultimate comparative results of the natural and inoculated disease among the animals. This cannot be accurately known for two or three weeks. The subject is one of extreme importance, not only to the owners of sheep, but to the public in general.—*Lancet.*

Correspondence.

FOREIGN CORRESPONDENCE.

LETTER X.

By PROF. CHARLES A. LEE.

BOARD OF WORKS—SEWERAGE.

London, July 15, 1862.

Having received an invitation from the "London Metropolitan Board of Works," to accompany the officers and members of the vestry of the different parishes in London to view their main drainage works, I joined a party this morning, and in carriages reached the works at Old Ford, several miles below the city, near the Bow station, on the North London railway, and opposite Woolwich.

I may premise, that the old sewers of London have been, for years, incompetent to perform the office for which they were assigned; not only this, they became an unwholesome, dangerous, and often fatal nuisance; poisoning the river, and causing a most offensive effluvium. So intolerable did this become, that during the hot summer of last season thousands of tons of lime were thrown into the Thames near Putney bridge, just at the turn of the tide, so as to act as a disinfectant. A beneficial effect is said to have been produced, but by no means adequate to counteract the deadly miasm. You are doubtless aware, that a large proportion of the ground on which London stands is so low, that the drains in connexion with the houses empty themselves into the river at a level considerably below high water mark. In some places the outfall is so low, that it is stopped by the tide for sixteen hours out of the twenty-four; in other places it is still worse, the stoppage continuing for twenty hours out of twenty-four. During all this time, the sewers in these localities are a sealed up mass of waste matter, which, accumulating with its own flow, and being forced back by the rising tide, not only sends out immense volumes of fœtid effluvia into the streets and dwellings, but frequently overflows with fluid filth into the cellars, basement floors, and low garden grounds of the more densely crowded districts. The health of these neighborhoods, of course, suffers in proportion, and thousands annually sicken and die of cholera, fevers, and bowel affections, who would enjoy good health, could they but breathe a pure atmosphere. Those drains, moreover, are quite unsafe to enter, many having perished who have ventured to enter them. In some cases, the refuse from factories and chemical works has filled the culverts with carbonic acid gas. Besides all this, during rainy seasons and in sudden floods, the existing drainage was entirely insufficient to carry off the water.

The carrying out an effective system of drainage has been under the consideration of Parliament at various times since the year 1848, and the present plan, the execution of which has been committed to the Metropolitan Board of Works, appears to comprise the best medical suggestions of scientific men most acquainted with the subject. From the circumstance that so large a proportion of the area of London lies so low as to be near the level of the Thames, or even several feet below it, it is impossible to drain the whole surface effectively without finding a much deeper level than the river presents. For all these low-lying districts, therefore, main sewers at a very low level are in course of construction on both sides of the river; and from these low level sewers the contents are to be pumped up by powerful stationary engines into the higher sewers, to be discharged into the Thames some fourteen miles below London bridge—so far from the Metropolis as to leave it unpolluted: or into reservoirs for deodorization and the formation of fertilizing manures. But, wherever the ground is sufficiently elevated to allow of it, the main sewers are constructed on levels high enough to render the drainage self-acting, so that pumping will not be necessary.

The new system of drainage, now being prosecuted, extends twelve miles from Charing Cross in every direction, embracing an area twenty-four miles in diameter and seventy-two in circumference. In order to secure a sufficient inclination, some of the new drains dip gradually to a depth below the main tunnels, before they join them; and where this is the case, pumping stations are erected, and the sewage pumped up into the outfall drains, as fast as it accumulates. Provision is also made for storms and sudden falls of heavy rains, by outlets communicating with the river. I may remark that under the present system over fifty-two million gallons of sewage are now daily poured into the Thames.

The main drainage scheme was commenced in February, 1859, and out of the estimated cost, £3,000,000, works to the amount of £2,000,000 are now under contract, some of which are completed, and most of them are in a rapid state of completion, embracing about fifty miles of main intercepting sewers, of which thirty-four are now completed; mostly underground, but in some places above it, crossing alternately over and under navigable rivers, railways, canals, and roads, and including pumping stations, aqueducts, pen-stocks, tide-flaps, and other appliances. I should have stated that the whole area on each side of the Thames has been divided into three levels, and the sewage is carried as far as practicable from the two upper levels by gravitation, while that from the low levels is raised by pumping, by which means the low districts will become as dry and as well drained as the upper districts, and the waters of the upper will no longer inundate the lower districts. Moreover, although the sewage from the main drains enters the Thames fourteen miles below London bridge, it is to be discharged during the first two hours of the ebb tide only, the period of discharge being restricted to those hours, because thus the sewage would be deodorized and diluted by a volume of water twenty times greater than that which now dilutes it at London; and because each ebb tide would, in returning to the sea, convey it to points twelve miles below the outfalls, or twenty-six miles below London bridge, through a constantly enlarging flood.

On arriving at the river Lea at Bow, I was surprised to find about one thousand gentlemen representing the various vestries of the parishes of London on the same errand as myself. After examining somewhat the northern high level sewer, which extends for a length of nine miles from Hampstead to the river Lea, we descended into the northern outfall sewer, which enters the Thames over four miles distant at Barking creek, and consisting of double and triple lines of sewer, each ten feet six inches in diameter. This is a most magnificent work, progressing rapidly, though not completed, crossing great marshes, where the foundation had to be laid twenty-five feet below the surface, and concrete filled in to form a solid embankment for the reception of the brickwork, for a considerable part of the way. We walked through a mile and a half of the portion of the sewer which is completed, admiring the solidity and beauty of the structure, the interior being well lighted with candles throughout; when we again emerged into daylight, and after examining the river aqueducts to convey the sewage over the rivers and railways, the tunnel under the Eastern Counties Railway embankment, and the culverts for carrying the marsh drainage under the sewer embankment, etc., we mounted a long train of gravel cars, and were soon set down on the banks of the Thames, where a generous *dejeuner* was waiting for our refreshment. Here under a tent of some two hundred feet in length, we found five tables extended the whole distance, and loaded with substantials and delicacies, not omitting a generous supply of ale and stout. These matters having been duly despatched, the usual toasts drunk, and speeches made, we embarked on board our steamer and steered direct for Deptford, adjoining Woolwich. Here we penetrated to a depth of some thirty feet below the surface, and entered the grand southern low

level sewer, which is about twelve by fifteen feet, ovoid as usual. After walking through this about half a mile or more, we came to the Deptford pumping station, and here, nearly forty feet below the surface, one thousand voices united in the grand chorus "God save the Queen."—The reverberations were like thunder to the ear, and seemed as if they would never cease. There was excitement as well as sublimity in the scene. Here four stationary engines of nearly two hundred horse power each, are placed, to pump up the sewage to the "Southern High Level Sewer."

But I must reserve further remarks on this subject to a future letter. I have written enough to give some idea of the magnificent work here in progress, which if it do not surpass, certainly equals any similar work ever executed at any period of the world, or by any people.

Army Medical Intelligence.

COMPLIMENTARY LETTER TO DR. SWINBURNE.

[The following complimentary letter from Surgeon-General Vanderpoel, of the State of New York, to Dr. Swinburne, of Albany, is a well merited testimonial to the patriotism and self-sacrificing spirit of the latter in the cause of justice and humanity. It will be remembered that Dr. Swinburne was a volunteer surgeon, and had charge of the hospital at Savage's Station, where he remained with the wounded until taken prisoner and conveyed to Richmond.—Ed. Med. Times.]

State of New York,
Surgeon-General's Office,
Albany, Aug. 5th, 1862.

Sir:—I am requested by His Excellency, Gov. Morgan, to express his high appreciation of the services rendered by you while serving with the Army of the Potomac as Medical Superintendent of the forces from this State, and acting Assistant Surgeon of the U. S. Army, and to return you thanks for the same.

An expression thus officially made, is not intended as invidious to the noble corps of volunteer surgeons, who so promptly and faithfully gave their time, their energies, their professional abilities, and in some instances their lives, to ameliorate the sufferings of the wounded, but that the position in which you were placed by the authorities of the State, the peculiar circumstances which resulted therefrom, and the manner in which you conducted yourself both professionally and as the representative for the time of your government, call for, as it is most cheerfully bestowed, the commendation and approval not only of the constituted authorities, but of a whole community, who have watched with vivid interest the responsibilities, privations, and labors, to which you were subjected.

As the head of the State Medical Bureau, I cannot forego the opportunity of thanking you for the bright example your labors have furnished of conservative surgery upon the field of battle. Had you merely, in the performance of your labors, done all which humanity demands, you would have merited the compliment proffered; but to that you have added the exercise of high professional skill. When in a hospital of two thousand sick and wounded, you amputated less than half a dozen limbs, but strove rather to save by exsection, you illustrated and carried out the views of the most intelligent of the profession.

Wishing you, in your safe return to your family and friends, the enjoyment of a well merited confidence, I am, with respect,

Your obd't servant,
S. Oakley Vanderpoel,
Surgeon-General.

John Swinburne, Esq., M.D.

INSTRUCTIONS OF THE SURGEON-GENERAL OF THE STATE OF NEW YORK TO INSPECTING SURGEONS.

State of New York,
Surgeon General's Office,
Albany, August, 1862.

Sir:—I enjoin upon you the utmost care and vigilance in the inspection of recruits.

In view of the large bounty now offered by the Federal and State authorities, numbers of incompetent men will present themselves.

As your position in the regiment has been made independent, you will not be influenced by the solicitations of officers desirous of rapidly completing their companies.

In any instance where it can be shown that an unsound recruit has been accepted through negligence on your part, the whole expense of bounty will be deducted from your pay, by reporting the fact to Washington.

Respectfully yours,
[Signed] S. Oakley Vanderpoel,
Surgeon-General.

———, M.D., Surgeon ——— Regt.

State of New York,
Surgeon-General's Office,
Albany, July 15th, 1862.

Medical Officers of Regiments, when inspecting recruits, will particularly examine in relation to the following points:—

1st. The recruit is to be stripped naked, and the condition of all the joints to be noted. See that hearing, vision, and speech are perfect; also that there is no wound of the head to impair the faculties, or cause convulsions.

2d. Whether there is any evidence of pulmonary disease.

3d. Any disease of the heart.

4th. Hernia, chronic difficulty of the bowels, no fistula or troublesome piles, large or painful varicocele, or varicose veins which extend above the knee, or present traces of old ulcerations.

5th. The following also are disqualifications: The loss of either phalanx of the thumb or forefinger of the right hand; the loss of any two fingers on either hand; the loss of the great toe; also chancre, or marked constitutional syphilis.

6th. Any other marked physical imperfection which would unfit for active service.

7th. Conform to General Order 52, current series from the Adjutant General's Office, in the manner of return.

8th. The following extract from General Order No. 75 of the War Department will also be strictly observed: "Recruits will be sent to the regimental rendezvous at least as often as once a week, where they will be immediately examined by the Surgeon of the regiment; and if found unfit for duty, by reason of permanent disability, will be discharged from the service forthwith by the Surgeon, who will report such discharges to the Adjutant-General of the State, and also to the Adjutant of the regiment, noting particularly those cases where the disability was obvious at the time of enlistment."

Report to this Office, on Saturday of each week, the number of men inspected, the number accepted, together with the name of the officer commanding each company.

No bills of expenditure of any kind connected with the Medical Department will be allowed.

Medical Officers will be held to a strict accountability to the above requirements.

S. Oakley Vanderpoel,
Surgeon-General.

SPECIAL ORDER.

Assistant Surgeon-General's Office,
St. Louis, Mo., August 29, 1862.

SPECIAL ORDER NO. 7.

The withdrawal of Surgeon Charles McDougall from the position of Medical Director of this Department, renders necessary the appointment of an officer of rank and expe-

rience to assume his duties. Surgeon MADISON MILLS, U. S. A., is selected for this position.

His supervision will extend over the army of the Southwest, the army of the Tennessee, the army of the Mississippi, and the army of the Ohio.

Medical Directors of these armies will make the reports and submit the information heretofore required by Surgeon McDOUGALL to Surgeon MADISON MILLS, in conformity with instructions which will be issued by him.

[Signed] R. WOOD,
Assistant Surgeon-General.

ASSISTANT SURGEON-GENERAL'S OFFICE,
St. LOUIS, Mo., August 30, 1862.

The following circular from the Medical Department of the West has been sent to the Adjutants-General of the following States: Michigan, Indiana, Illinois, Kansas, Minnesota, Wisconsin, Iowa, and Missouri; also to Brig. General SCHOFIELD, and to the Adjutant-General of the Department of the Ohio:—

ASS'T SURGEON-GENERAL'S OFFICE,
St. LOUIS, August 28, 1862.

SIR:—I have to inform you that purveying depots, for the supply of hospital and medical stores, instruments, &c., for the permanent equipment of new regiments for field service, have been established at Chicago, St. Louis, and Cairo.

Requisitions for such supplies, signed by the senior medical officer, should be forwarded to this office for approval at least one week before the departure of the regiments, in order that the supplies may be ready for issue on their arrival at, or in the vicinity of, the cities in which the depots are located.

Temporary supplies, needed during the organization of the regiments, can be obtained from local sources.

It is respectfully recommended that regiments organized for the Field, should have their full complement of Medical Officers: one Surgeon and two Assistant Surgeons.

Very respectfully, your obedient servant,
(Signed) R. C. WOOD,
Assistant Surgeon-General.

Medical News.

BOYLSTON MEDICAL PRIZE QUESTIONS.—At the annual meeting of the Committee on Wednesday, August 6th, a premium of Sixty Dollars, or a Gold Medal of that value, was awarded to FRANCIS MINOT, M. D., of Boston, for the best dissertation on the question: *On Nausea and Vomiting, as symptoms, under what circumstances do they occur, and what indications do they afford as to the seat and character of disease?* The following are proposed for 1863:—1. *On Trephining the Skull for Injury or Disease.* 2. *On Leucocythæmia.* Dissertations on these subjects must be transmitted, post paid, to Edward Reynolds, M.D., *on or before the First Wednesday of April*, 1863.

The author of the best dissertation considered worthy of a prize on either of the subjects proposed for 1863, will be entitled to a premium of *Ninety Dollars*, or a Gold Medal of that value. The following questions are proposed for 1864:—1. *On the Treatment of Fractures without Splints.* 2. *The Remittent Fever now prevailing in the U. States Army.* Dissertations on these subjects must be transmitted as above, *on or before the First Wednesday in April*, 1864. The author of the best dissertation considered worthy of a Prize for 1864, will be entitled to a premium of *Ninety Dollars*, or a Gold Medal of that value.

Each dissertation must be accompanied by a sealed packet, on which shall be written some device or sentence, and within which shall be inclosed the author's name and residence. The same device or sentence is to be written on the dissertation to which the packet is attached. The writer of each dissertation is expected to transmit his communication to the Chairman of the Committee, in a legible hand-writing, within the time specified. All unsuccessful dissertations are deposited with the Secretary, from whom they may be obtained, with the sealed packet unopened, if called for within one year after they have been received.

OBITUARY NOTICE.—At a meeting of the Surgeons of the Hospital at Evansville, Ind., held on the 25th August, 1862, at the office of Dr. DeBruler, to take measures for paying proper respect to the memory of their deceased brother officer, Dr. I. N. MYERS, late Resident Surgeon of Hospital No. 2, Dr. J. P. DeBruler was called to the chair, and Dr. W. D. Turner appointed Secretary.

A committee, consisting of Drs. Wirtz, Temple, and Jeancon, was then appointed to express the sense of the great loss the Hospital corps of this city, and the profession, has sustained in the sad event. The following report was adopted and ordered to be published, and manuscript copies sent to the friends of the deceased:

It has pleased Providence to remove from among us one of the most gifted and beloved of our number. Dr. Myers was a young man of rare promise. With large perceptive faculties, a ready and discriminating judgment, and a powerful memory, he combined the severest habits of study, which rendered him, even at his early age, distinguished among his fellows.

His devotion to his profession was unbounded,—his days were passed in the sick-ward and the dissecting room—and his nights devoted to the collation of his observations and the study of the best authors. But this self-imposed labor, the earnest of future fame, was too much for his feeble body, and was the cause of cutting short a life so valuable to science and so dear to us all. So fine an intellect, so good a heart, so noble a man, is a loss not only to his profession and his friends, but to society; and so excellent an example of entire devotion to the cause of suffering humanity, cannot be too long remembered. He did not die upon the battle-field—but by the side of those who had risked their health and lives in the nation's cause, he imbibed the fatal poison that made him a martyr to science and a willing sacrifice to his country.

While we deeply feel the blow that has taken from our midst this young spirit, so full of promise, we also desire to express to his relatives and friends at home, our sincere condolence, and trust that the memory of the virtues of the departed may have their softening influence on the grief occasioned by his early loss.

REBEL SURGEONS RELEASED FROM CAMP DOUGLAS. The rebel Surgeons released numbered nineteen, viz. Joseph Sandeck, Surgeon Heavy Artillery; Sam'l H. Caldwell, Surgeon 46th Tennessee; Thos J. Taliaferro, Ass't Surgeon 41st Tennessee; Delmos F. Connell, Ass't Surgeon 1st Alabama; J. McLin Driver, Surgeon 55th Tennessee; Mathew H. Oliver, Ass't Surgeon 17th Alabama; Robert H. Redwood, Surgeon 21st Alabama; Caleb Foxey, Ass't Surgeon 19th Alabama; Elisha G. Greenlee, Surgeon 2d Kentucky: Robert G. Rethrock, Ass't Surgeon 2d Kentucky; John F. Kennedy, Surgeon 14th Mississippi; Kelly Williams, Ass't Surgeon 14th Mississippi; John F. McDowell, Ass't Surgeon 12th Alabama; Robt. A. Fulton, Ass't Surgeon 7th Texas; Thos. B. Elkin, Ass't Surgeon 20th Mississippi; William A. Martin, Surgeon 1st Ala., Tenn. and Miss.; Michael J. Bolar, Surgeon 17th Alabama; Sam'l B. Johnston, Ass't Surgeon, Regular C. S. A; Jas. W Duprer, Ass't Surgeon Light Artillery.—*Chicago Jour.*

MEDICAL RESPONSIBILITY.—How shall surgeons deal with a patient raving in the dangerous delirium of drink? At all our hospitals such a patient is managed by gentle coercion, or placed under supervision in a padded room, *nolens volens*, until time and treatment shall have restored his self-control. The recent decision, Scott *v.* Wakem, seems to affirm that a surgeon called by the nearest relative has no right to assume the management of the delirious sufferer from drunken madness, and that he is liable to an action at law if he

use restraint to control his dangerous impulses. On the other hand, what would be said if, in future, surgeons should decline to undertake the responsibility of treating patients suffering from delirium tremens! If the jury in this case correctly interpreted the law, we commend this state of legal doctrine to the attention of the House of Lords, who recently manifested so lively an interest in law and lunacy. This subject will command attention in the profession, and receive further careful consideration on our part.—*Lancet.*

Royal College of Surgeons of England.—The following are the subjects for the Collegial and Jacksonian Prizes for the present and succeeding year, to be awarded by the Council of this institution:—The Collegial Triennial Prize on the Structural Anatomy and Physiology of the Lymphatic Vessels and Glands (the Anatomical Distributions not being required); the communications (if any) between the Lymphatics and the Blood-vessels to be demonstrated; and the influence (if any) which the Lymphatic Vessels or Glands exercise on the fluid they transmit to be elucidated. The Dissertation to be illustrated by Preparations and Drawings. There are two Jacksonian Prizes for the present year, the subjects of which are the Relative Value of the treatment of Popliteal Aneurism by Ligature and by Compression: illustrated by a reference to cases; and the Healthy and Morbid Anatomy of the Tonsils, and the appropriate Treatment of their Diseases: illustrated by preparations and drawings. There are also two subjects for prizes for the ensuing year, 1863; namely: The Pathology and Treatment of Diseases of the Larynx; the Diagnostic indications to include the appearances as seen in the living person: the dissertation to be illustrated by drawings and preparations; and the Normal and Pathological Anatomy of the various Synovial Bursæ connected with the Muscles and Tendons of the upper Extremity, and the Treatment of their Diseases: the dissertation to be illustrated by preparations and drawings. The terms and conditions will appear as an advertisement in the next number of this Journal.—*British Med. Journal.*

Social Science Congress, London.—We are pleased to notice that our distinguished countryman, Prof. Lee, was honored with the chairmanship of the Section on Public Health, at its session, June 11:—The meeting of this section was resumed yesterday evening at half-past 8 o'clock, at Burlington-house; Professor Charles A. Lee, M.D., of New York, in the chair.

Mr. E. Chadwick moved the following resolution:—"That the Committee be requested to consider the expediency of promoting the practical adoption of the measures examined and prepared by the last International Statistical Congress for the regular issue of Sanitary Statistics under the uniform heads then agreed upon, especially those heads of statistics displaying the bearing of the chief causes of preventible mortality upon the wage classes as well as upon the other classes of society, more particularly in those districts, or blocks of habitations, where new works of house drainage and sanitary improvement have been extended."

Dr. Farr considered that the resolution proposed was one which ought to meet with universal approbation. Sanitary statistics had been of the greatest use in the army and the navy, and would undoubtedly be so with regard to our laboring population.

The Chairman thought the Government ought to supply statistics of sickness as well as of death.

The resolution was then put, and carried unanimously.

Dr. Farr moved that measures should be adopted for obtaining the same information respecting the civil population as is now obtained respecting the army and navy, and that the counsel of the Association he requested to bring the resolution under the notice of the Colleges of Physicians and Surgeons, as well as of her Majesty's government.

After some further discussion, the proceedings terminated.—*Daily News.*

At the late Commencement of the Long Island College Hospital the following gentlemen were candidates for the Degree of Doctor of Medicine: 1. William A. Webster, of New Hampshire; 2. J. C. Morton, of New York; 3. Henry A. Heilner, of Pennsylvania; 4. Joseph McMonegal, of New Brunswick, B. N. A.; 5. O. R. Wilcox, of Albany; 6. Otis M. Humphrey, of Massachusetts; 7. William Richards, of Cuba; 8. Abram H. Hunt, of Ohio; 9. Louis V. Estelle, of France; 10. Asher A. Shiverick, of Massachusetts; 11. William W. Lamb, of Pennsylvania. Dr. Mason, the President, in the course of his address to the graduates, remarked on the call that our present condition as a nation has upon the patriotism and self-denial of her citizens, and mentioned that the class of '60 and '61, when there was much less need, contributed largely to this great cause. "Prentiss and Brown, Demainville and Pearse, Lynch and O'Leary, E. O. Brown, Deering, and others, whose names I cannot recall, with Webster and Heilner, of our present class, with Dalton and Hamilton, two of our most highly esteemed and accomplished professors, have dedicated themselves to the high and holy work. I trust the class of '62 will not be behind them."

A Large Dose of Chloroform.—A remarkable case is related by a correspondent of the *London Medical Times*, in which a person aged fifty swallowed at one dose two ounces of chloroform. The patient fell into a profound coma; the pupils were widely dilated and insensible; the pulse slow and feeble; surface of the body colder than natural; movements of the thorax scarcely perceptible, and sensation generally abolished. Several hours elapsed before any remedies were employed. A stomach pump was used, and a quantity of chloroform, mucus, and watery fluid was removed, and the stomach thoroughly cleansed with tepid water. In less than an hour afterwards there was a return of consciousness. For three or four days there were signs of irritation of the throat and stomach, and at the end of a week the patient was quite well again.

Buffalo Physicians in the Government Service.—*U. S. Army.*—Dr. Chas. K. Winne, Assist. Surg., Clarksburgh, Va.

Volunteers.—Dr. Chas. H. Wilcox, Brigade Surg., Genl. Patrick's Brigade (resigned, and is again Surgeon 21st Reg., N.Y.V.); Dr. Jos. A. Peters, Assist. Surg., 21st N.Y.V.; Dr. Lucien Damainville, Surgeon 31st N.Y.V.; Dr. E. P. Gray, Surgeon 100th Regt., N.Y.V.; Dr. E. L. Bissell, Assist. Surg. 44th N.Y.V.; Dr. J. W. Casey, Assist. Surg. 105th N.Y.V.; Dr. Wm. H. Butler, (Sick leave.) Assist. Surg. Mich. Volunteers; Dr. F. J. Bancroft, Assist. Surg. Penn. Volunteers; Dr. Sylvester Rankin, Assist. Surg New Mexico Volunteers; Dr. S. B. Hunt, Volunteer Surg., Yorktown; Dr. Charles Winne, Volunteer Surg.

U. S. Navy.—Dr. Newton N. Bates, Assist. Surg., Gunboat "Seneca;" Dr. Wm. Howell, Assist. Surg., sick leave; Dr. S. D. Flagg, Jr., Assist. Surg., Gunboat "Connecticut;" Dr. Wm. B. Mann, Assist. Surg., Gunboat "Miami;" Dr. Geo. D. Slocum, Assist. Surg., S. Sloop "San Jacinto;" Dr. H. P. Babcock, Assist. Surg., Waiting Orders.

U. S. Volunteer Navy.—Dr. Ira C. Whitehead, Assist. Surg., Key West; Dr. Geo. L. Sweet, Assist. Surg., Gunboat "Isaac Smith."

With the Sanitary Commission.—Dr. Horace Tupper, Pittsburgh Landing; Dr. C. B. Hutchins, Pittsburgh Landing.—*Buff. Med. and Surg. Jour.*

The anniversary oration before the New York "Beta" of the "Phi Beta Kappa" Society, delivered June 17, was almost entirely historical. Its subject was a general history of Slavery in all ages of the world, a particular history of American Slavery, and a detailed account of the successive stages in the progress of the Pro-Slavery sentiment of the Southern States, commencing from the time they, with the North, resisted its introduction into the colonies by England, progressing through the Revolution; when it was universally conceded to be an evil, continuing to a later period, when it began to be apologized for, afterwards to be defended, and finally to be eulogized, and winding up with its connexion with the present rebellion and its probable ultimate fate.

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.

SESSION 1860-61.

LECTURE XII.—PART IV.

By A. JACOBI, M.D.,

PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Laryngismus Stridulus and Craniotabes.

I HAVE stated that the cause of laryngismus must be looked for in a nervous centre; at all events there is no disease of any of the respiratory organs which exhibits similar symptoms, and post-mortem examinations have resulted in nothing that could explain those symptoms by any local alterations in the lungs or heart. Old Goelis already describes cases of mild laryngismus in connexion with chronic hydrocephalus. Keitel found, besides a hypertrophied and degenerated thymus gland, the skull soft, and its sutures and fontanels large, both the osseous and cerebral tissues soft and hyperæmic, oblongated spine also soft, its membranes congested, and a tablespoonful of clear serum in the upper portion of the vertebral canal. Marshall Hall once found the oblongated spine harder than normal; Evans made the observation of a child born with spina bifida, who would have an attack of laryngismus whenever the liquid of the sac was pressed into the vertebral canal. Caspari found the substance of the spine solid and white, and its dura mater much injected. The sinuses of the brain were filled with an enormous amount of black and thin blood, the substance of both the large hemispheres and cerebellum very soft. The phrenic nerve, moreover, was uncommonly hard, but the pneumogastric nerve "appeared more similar to the brain."

After all, the uniform presence of some alterations in the nervous centres appears to prove my first proposition, that laryngismus is the symptom of a deep-seated anomaly. In many cases congestion and inflammation of the membranes, especially the brain, have been found, together with their consequences, viz. more or less transudation. This process may take place very slowly indeed, and very generally does have a slow progress. Many cases of cerebral or meningeal effusion undoubtedly take place without laryngismus, but that laryngismus should occur without any affection of the nervous centres is more than merely doubtful. But there is one disease which appears to be the fundamental cause and origin of laryngismus. It is rhachitis. I merely refer you to a former lecture in order to remind you of these facts, that rhachitis is not only a disease of the osseous tissue, that originally, indeed, it is the result of disorders in digestion and assimilation, and that impaired nutrition brings on anomalies in all the system thus intimately connected with rhachitis. Particularly it is the form of rhachitis which is found in nurslings which is apt to bring on severe and general symptoms, viz. the rhachitical softening of the cranial bones, or craniotabes, of which I have also spoken in a former lecture. Craniotabes is always connected with meningitic processes, effusion between the meninges, and into the brain and its ventricles; and thus its direct connexion with a large amount of cerebral effusion is easily understood.

Old authors, whose reports Elsaesser has collected in his book on "the soft occiput," although they did not understand the importance of the rhachitical softening of the parietal and occipital bones, relate a number of post-mortem examinations and cases illustrating the subject. Of the cases of Kopp, one who died at ten months, had a very large fontanel, ununited sutures, and very flexible cranial bones; in another who died before the end of the fifth month, he mentions flexible cranial bones, and large fontanels. Caspari relates the case of a child, which was very large and fat, but always had "phlegm on his chest," and a large head, large fontanels, and swollen epiphyses; he adds, that the majority of his infants affected with laryngismus stridulus, had a rhachitical predisposition. Other writers accurately describe cases of craniotabes, the symptomatology of which I have given you in my lecture on the connexion of diseases of the bones with dentition. Thus Pagenstecher speaks of a child who was very large and fat, and was affected with convulsions in his seventh month, and afterwards with attacks of apnœa. Being sick so long, it grew emaciate and thin, and his skull had quite a peculiar, no longer spherical, but remarkably irregular and asymmetrical form. Hirsch found twice, a large head, and large fontanels. Keitel describes the attacks, and body of a child who died in his twenty-second week, and had mostly ununited sutures; the small, triangular fontanel remained still open; the quadrangular was unproportionately large, and the skull soft and thin. Hachman has a similar report. In Günther's child after weaning, "a true rhachitical constitution" developed itself, and gradually also the attacks of laryngismus. Landsberg also found the sutures open, and delays in protrusion of the teeth. In one case of Hauff's, all the cranial bones appeared of a dark blue color, and were so little ossified as to be easily cut by means of a knife and scissors, and so thin that the squamous parts of the temporal bones, and some parts of the parietal and occipital bones, had the thickness of good-sized paper. In another, the chest was very similar to the "chicken chest," and the commencement of rhachitis could not be denied. A child of Staub's had already in its first year the unmistakable symptoms of rhachitis, and had its first tooth at eighteen months.

Many such cases could be collected from literature; but those above taken from older authors, suffice to illustrate the connexion between craniotabes and laryngismus. It is true, however, that not every case of this affection must necessarily be the result of craniotabes. Elsaesser reports the case of a child who had his laryngismus brought on by hooping-cough, not before his craniotabes had healed; and there are a few cases of laryngismus in the second or third years, where craniotabes is generally no longer present. Thus other causes may bring it on; but do not forget, that nervous affections will oftentimes not disappear with the removal of their causes, and that together with craniotabes, alterations take place inside the cranium which are not so liable to heal as the affection of the osseous tissue itself; therefore, craniotabes may still be the cause of laryngismus, even where it appears to have entirely passed by. I hardly remember a case of my own, in which symptoms of general rhachitis and of rhachitical softening of the cranium were absent in laryngismus; thus this much is certain, that the majority of cases of laryngismus, or crowing inspiration, depend on craniotabes and general rhachitis. It is always the great predisposing cause, and thus the last and proximate causes of an attack of our disease, as we find them enumerated in the text books, such as fright, anger, cough, protrusion of a tooth, etc., are thus assigned their right place of but occasional and temporary importance. By the defective condition of the cranium the brain is more subject to external injuries, concussion, quick movements of the head, improper carrying on the arm, lying on a hard pillow, rocking, and high temperature both artificial and solar; and finally, we must not overlook the importance of such alterations as invariably take place, in rhachitis and craniotabes, in the nutrition of the system and the condition of the brain. At all events, you will hardly ever be mistaken in your etiology, when on examining a new case of laryngismus, you look for craniotabes. Whenever a child with laryngismus is brought to me, my first attention is given to the occiput and epiphyses, & my first prescription is almost invariably the regulation of diet and the use of iron.

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from page* 129.)

Again, the frequent dependence of Bright's disease on hypertrophy and valvular disease of the heart has been referred to. The nature of this dependence needs explanation, at least to my own mind. It occurs, as will be seen hereafter, much more frequently with hypertrophy alone, or with hypertrophy and mitral disease, than with obstruction at the aortic opening. This may be saying no more than that enlargement and deformities of the mitral valves are in themselves more common than disorders of the aortic valves. But it occurs with obstructive changes in the latter valves occasionally. This would seem to preclude the supposition that the secondary renal affection arises from crowding the kidneys with blood through the increased size and strength of the left ventricle. Still, the point has not yet been studied with the care which will authorize us to say that our data are positive and reliable. But there are grave nervous disturbances in hypertrophy and valvular disease, as seen in the irregular occurrence of palpitations and dyspnœa. It is possible, then, that this nervous agitation may be reflected upon the nerves of the kidneys, as it is upon those of the lung. The kidney affection cannot, in the present state of our knowledge, be referred to an unnatural condition of the blood; for such unnatural condition has not been demonstrated, and there are no symptomatic evidences of it up to the time when the complication usually occurs. Thus, then, we must say that hypertrophy and chronic valvular affections of the heart are frequent causes of Bright's disease; and we cannot at present explain satisfactorily the mode in which one organ acts on the other.

It is perhaps equally difficult to explain the mode in which pregnancy produces Bright's disease. The theory that it depends on the pressure of the gravid uterus upon the abdominal aorta below the origin of emulgent arteries, and the consequent surcharge of the kidneys with blood, though sustained by the authority of Rayer and Litzmann, has not the full support of experiments. Mr. Robinson (*Med. Chir. Trans.*, vol. xxvi., p. 74) found that in tying the abdominal aorta below the emulgents in two rabbits, only one of them secreted albuminous urine, and the quantity of albumen in that one was but small. I have not seen the report of Frerichs's rehearsal of the same experiments, but it is stated (*Brit. & For. Med. Chir. Rev., April*, 1852, p. 244) that he arrived at the same results. This is not a very solid foundation for an hypothesis, and yet it may give color to the opinion, especially when it is remembered that the animal which furnished the albuminous urine only lived ten hours, and the other was killed in forty minutes, while the uterine pressure, if it exists, lasts for months. But the well known gastric and mammary sympathies of pregnancy demonstrate a wide range of nervous relations, and suggest the theory of reflex nervous action. Nor is the idea, that the kidney changes depend on the changed condition of the blood, excluded. For it is claimed that this fluid in pregnancy contains more water, fibrine, and colorless globules, and less of albumen and red corpuscles, than in other normal conditions. It may be, as Frerichs supposes, that the mechanical obstruction to the circulation and the altered condition of the blood co-operate together in producing the kidney disease. Thus do the explanations differ, though albuminuria has been recognised as a frequent attendant on pregnancy, and puerperal convulsions as dependent on albuminuria since the first was announced by Rayer, and the second by Lever.

The albuminuria of phthisis pulmonalis occurs in the later stages of the tuberculous affection, when the blood has already undergone grave changes, and it is certainly not impossible that the congestion and renal lesions may depend on this unhealthy state of the circulating fluid. But, on the other hand, the lungs have usually already suffered fatal erosion. The nervous sympathies have often been extensively and painfully invoked. That the innervation of the kidneys should be modified by what in this discussion has been called reflected or reflex influences, should not be surprising. A parallel influence, though in the opposite direction, is sometimes very marked. When the peritoneum becomes covered with tubercles, and tubercular peritonitis is well established, the lungs are so far deprived of their usual sensitiveness, that large excavations may be formed in them, and yet the alarm-bell is never once sounded; there will be no cough from first to last.

Regarding the diseases of debility and the cachexias that induce Bright's kidney, they perhaps act through the changed condition of the blood. It seems to be very generally admitted by physiologists that there is no state of the circulating fluid so favorable to its ready transit through the vessels as its normal state, that is, as when it possesses all its constituents in due proportion. "It is an important physiological and pathological law," says Johnson (p. 248), "that the blood, in order to circulate freely through the capillaries, must be in a normal condition, and that any departure from its healthy composition is associated with more or less of impediment and retardation in the capillary circulation." Assuming the truth of this proposition, though it has been proved of certain unnatural conditions only, we find a reason for embarrassed circulation in every part of the body during the continuance of a cachexia, and in the kidney especially, when this circumstance is aided by some other agency operating upon these organs. But I must confess that this kind of reasoning is very unsatisfactory; and were it not that a study of possible influences sometimes leads us to truth, or excites further inquiry, I should not have taken the time to consider this somewhat extended series of hypotheses

Among the external agencies which are usually enumerated as capable of producing Bright's disease, are cold, alcoholic drink, and diet. The important influence which the temperature and the secretions of the skin exert upon the kidneys, is a part of every man's personal experience. Nothing illustrates this more strikingly or more appositely to our present purpose, than the experiments which suspend the cutaneous secretions. Carpenter (*Manual of Physiol.* Para. 746) states that when the exhalant action of the skin is completely checked by the application of an impermeable varnish, the temperature of the body falls, and in a short time fatal results ensue. I had an opportunity of witnessing this experiment last winter at the College of Physicians and Surgeons. Dr. Styles, to aid his teaching, had the fur of a rabbit removed, and covered the skin with a coating of collodion. In an hour or two the urine was albuminous, and the animal survived only a short time. Carpenter adds:—"A partial suppression by the same means gives rise to febrile symptoms and to albuminuria." The opinion is universal that it is exposure of the surface of the body to cold air which produces the dropsy, and other symptoms of Bright's disease, after scarlatina. That this belief is well founded in the main, I do not doubt. At least, so much as this is true. The predisposition exists, or rather the disease has commenced through the influence of the scarlet fever; and as that affection subsides, the renal disorder is disposed to subside—but the cold renews the congestion, and kindles into a blaze the smouldering fire. That this is the correct view, is rendered highly probable by the occurrence of scarlatinal dropsy in children who are most carefully and prudently protected from the cold. Such a case occurred in the practice of Dr. Stephen Smith last winter. Not a breath of cold air had touched the body of this child. The rooms were large, and all the time kept at a temperature of 70°. During her convales-

cence from the exanthem, she had the range of these rooms, and never left them. Her clothing, also, was carefully looked to. Yet this child did not escape. Then, too, that there are other influences at work besides the cold, would be inferred from the fact that the dropsy, when it occurs, has its time, occurring after an interval nearly as definite as the period of the eruption itself. Still, that cold and diminished exhalations from the skin have an active agency in producing both the acute and chronic forms of Bright's disease, can hardly be doubted.

As to diet, its influence is traced with more difficulty, and I have little to say about it. That the ingestion of an excess of albuminous food should be followed by albuminous urine is hardly a fact in point, for that sort of albuminuria is not Bright's disease. That certain other articles of food, vegetables, for example, should cause the urine to be albuminous for a few hours, has been, in some instances at least, explained by the further study of the cases. Bright's disease had already commenced, but the urine was not albuminous, except when the kidneys were excited by something which operated unkindly upon them. If any article of wholesome food has the power to cause chronic disorganization of the kidneys, I think it is yet to be demonstrated. If scanty and innutritious or unwholesome food produces Bright's disease, it is probably because of the unnatural condition of the blood which such food induces.

Regarding alcoholic drinks, it appears to me that their power to produce Bright's disease in either of its forms, has been greatly overstated. There is a conviction in the minds of many physicians, that this affection is a badge of intemperance. How wide this is of the truth may be partly seen from what has been already said. The opinion seems to have arisen from the fact that the renal disorder has been chiefly studied in hospitals, where a large proportion of the patients are found to have been intemperate, whatever may be their actual disease. I do not mean to deny that alcoholic drinks are among the causes of this affection. It is undoubtedly true that they have great power in exciting the kidneys to action, and these organs eliminate from the system certain of their constituents. It is probably true also that they disturb that "definite composition of the blood," which Poisenille found necessary to insure healthy secretion. It may be that they "impede the circulation" in the kidneys. It is certain that they are capable of much mischief, and that many hard drinkers have Bright's disease. But it is not true that any particular form of this disease depends on them alone. I would especially oppose the notion of Goodfellow, that the fibrous kidney is in any but the very loosest sense the "spirit kidney." He says (p. 190 and 192), of the fibrous and hobnail ("granular") kidney; "this alteration is very commonly seen in both these organs (kidney and liver), in old drunkards, especially and almost exclusively those who take the raw spirit, or spirit mixed with only a small quantity of water." He holds that the form of disease produced by beer, etc., is "a mixed kidney, something between the large white kidney which we see after scarlatina and the true granular (hobnail) kidney, with more or less fatty deposit both in the tubes and in the interstitial tissue." This distinction may be well founded in its application to kidneys in which disease is caused by spirits only, or by beer only. In this country none are habitually intemperate on beer alone; we have, therefore, no opportunity of verifying the latter statement. But if it is to be inferred that any form of Bright's disease is produced by alcoholic drinks, and cannot be produced by other causes, or is only rarely produced by other causes, then I am sure the statement is without foundation. Hardly less than this would justify the application "spirit kidney." Of many small fibrous kidneys found at post-mortem examinations in *private practice*, I cannot now recall one that occurred in the person of a spirit drinker. Two cases, for example, occurred in the practice of Dr. Watts, in the same street and in houses nearly opposite each other. In each of these, the kidneys were both small, one of them in each instance not exceeding one ounce and a half in weight, and hobnail (granular). Dr. Watts will bear me witness that they were both temperate men. One of them indeed, a man fifty-eight years of age, had never tasted intoxicating drink of any kind from his childhood. His mother was alarmed by the effects of some gin given him in his infancy, and as he grew up, she exacted a promise from him that he would never, in all his life, taste intoxicating drinks—a promise which he had, according to his own statement and the united testimony of his family, religiously kept. Yet a post-mortem examination disclosed not only fibrous and contracted kidneys, but also fibrous degeneration or cirrhosis of the liver. Dr. Bulkley saw this case and will confirm this statement. I cite these cases, not as medical curiosities, but as instances in a class of cases which is far from being small, in my experience. If I may step out of my proper path for an instant, I will add that excluding hospital practice, I believe that at least one half the cases of fatal cirrhosis that I have met with, have been in persons who were either abstinent or strictly temperate in the use of alcoholic drinks.

DIFFICULT OBSTETRICAL CASES.

By GEORGE T. ELLIOT, Jr., M.D.

PROFESSOR OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN IN BELLEVUE HOSPITAL MEDICAL COLLEGE, PHYSICIAN TO BELLEVUE HOSPITAL AND THE LYING-IN ASYLUM, ETC.

(*Continued from* p. 130.)

CASE XCV.—*Pleuro-Pneumonia and Bronchitis after Confinement; Granular Kidney.—Death.—Autopsy.*

Mary Foley, after a natural labor, presented in a day or two these symptoms (Bellevue).

Feb. 10th, 1862.—Pulse 74; skin covered with sweat; comparative slight dulness over right side posteriorly, where there existed a point de côté and friction sound; absence of vocal vibration over dulness; no bronchial respiration or bronchophony; crepitant râles over both lungs anteriorly and posteriorly; wheezing; inspiration suddenly arrested. Lochia and milk suppressed. 7 P.M, Pulse 120, resp. 28; flushed cheeks; crepitant râles much more extensive everywhere. True crepitus of pneumonia now distinguished posteriorly and to the right. Urine examined by Prof. A. Flint, Jr., gave specific gravity 1011.370176; albumen none; chlorides abundant; small amount of urate of soda. Treatment.—Beef-tea with milk-punch and eggs; diaphoretics and diuretics; oiled muslin jacket; twenty dry cups over back and side.

Feb. 11th, 11 A.M.—Pulse 100, resp. 20; tongue covered with a whitish fur. Says she is much better. Urine free, no lochia, no tenderness on pressure over abdomen, uterus, or either groin. Nares dilate in inspiration, circumscribed flush on cheeks. Anterior part of chest everywhere resonant as yesterday, some sibilus and rhonchus on auscultation. Dulness over right side posteriorily, bronchial respiration and voice not well marked, but voice sounds heard more distinctly here than yesterday. Vocal vibration not distinct to the hand; no friction sounds. Crepitant râles diffused over lower lobe of right lung, higher and smaller in the upper than in the lower part. Full inspirations unattended with pain. On left side marked diminution of moist râles; respiration much more distinctly heard than yesterday. Sputa muco-purulent, not remarkably adhesive, preserving their separate shapes. 5 P.M.—Pulse 104, resp. 24. No lochia, no milk, no pain, very comfortable, marked diminution of circumscribed flush. Chlorides abundant in urine. Treatment as before, with free use of whiskey during the last twenty-four hours.

Feb. 12th, 10 A.M.—Expression of face worse, skin somewhat dusky; lips pale; perspiration standing in beads; pulse 116, resp. 17; tongue as yesterday; decubitus dorsal; legs down; no pain on abdominal pressure; no lochia; sputa the same. Tracheal wheezing in respiration considerable. Patient raises herself in bed for examination.

Percussion posteriorly the same; vocal vibration posteriorly to the right increased to the feel; crepitus in inspiration the same as yesterday; prolonged expiration; slight exaggeration of voice sounds over right chest posteriorly in coughing; full inspiration without pleuritic catch. Anterior part of chest resonant on percussion; sibilus and rhonchus; on right side posteriorly crepitus extensive everywhere at end of inspiration. Dry cups over anterior part of right and posterior part of left chest. 8 P.M.—Pulse 140, resp. 28. Delirious, has seen black spots on wall during the day. Urine found to contain small granular cysts and some urate of soda by Dr. A. Flint, Jr.

Feb. 13th, 3 P.M.—Raises herself in bed. Pleuritic friction sound now over the right side; respiratory sounds anteriorly and on the left better. No tenderness over abdomen; tongue white. 12 P.M.—Delirious, will try to walk, coughs much, sputa viscid. Pulse 120, resp. 28.

Feb. 14th, 10 A.M.—Dilatation of nostrils, flushed face, moist white tremulous tongue; marked dulness over both lungs posteriorly; respiratory sounds too feeble to be studied. Pulse 110, very weak; respiration 40, and very short; no lochia; little milk. 11½ P.M.—Pulse very weak, 120; delirious; picking at images; decidedly belligerent.

Feb. 15th, 6 A.M.—Died by asthenia.

Autopsy.—Right lung. Upper and middle lobes crepitant; lower solid to the touch. Lower lobe roughened everywhere but on the posterior part by lymph, which is deposited in thick circumscribed patches between the lobes. On section the lower lobe was found to be solid, and the whole lung weighed four pounds eight ounces. The right pleura contained about ℥iv of fluid. The costal pleura smooth. The left lung crepitated everywhere, and the pleura was healthy. Bronchial mucous membrane very congested. No œdema, weight one pound three ounces. The heart was healthy, and weighed eleven ounces. Uterus weighed one pound fourteen ounces, well contracted, no clots in sinuses, healthy looking. Spleen weighed seven ounces. Each kidney weighed ℥vj. Capsules unadherent, stellate veins markedly full.

A portion of the kidney was examined by Prof. Alonzo Clark with the following result. "A large amount of granular matter infiltrated into the intertubular substance, though the kidney does not exceed ℥vj in weight. Fibrous tissue abundant with numerous newly formed fibres, a few of the malpighian bodies shrunken, the tufts diminished to ½ or ¼ their natural size and pale. The greater number of natural size or larger, and all these of uniform bright red color from congestion, and contrasting very strongly with the surrounding tissues. Capillary vessels themselves not visible, but the coloring matter of the blood seems to be diffused through the tufts. Cells of the tubes all in an unnatural condition, either granular or fatty, and many were both. The amount of oil in none excessive. Cells of the tufts were not fatty or granular."

Case XCVI.—*Bronchitis and Œdema of the Lungs in a Primipara after Confinement.—Death.—Autopsy.*

Very much to my regret the full notes of this case have been lost. But an incomplete memorandum is not uninteresting which presents the facts that this young primipara, in appearance robust and healthy, passed through a natural labor in Bellevue without assistance, and died from the diseases named in the heading of the case. As a means of relief free *inhalations of the nitrous oxide gas* were given repeatedly; and certainly under the influence of this agent, Prof. Austin Flint and myself saw the marked duskiness of the face obviously diminish. Towards the close of this poor woman's life, however, she expressed a preference for the inhalation of steam.

An insufficient quantity of urine in an imperfectly cleaned bottle was sent to Dr. Wm. H. Draper for an opinion, but his opinion was not satisfactory to himself for these reasons. Some slight albumen he thought might be due to the albuminoid pus, and he noticed some fragments which might be due to the presence of fatty casts, but nothing under the circumstances sufficient to ground an opinion upon. A portion of the kidney being sent to Dr. Draper for examination, he found "the degeneration of the kidney to be more marked than I have ever observed. In the cortical portion the tubuli were so filled with fat as to obscure if not altogether to exclude the existence of epithelium. The inter-tubular structure also was everywhere full of oil globules. In the pyramidal portion the degeneration was less complete, but still considerable; many of the tubes were distended with fatty matter, and many were entirely empty—some exhibited the epithelial lining imperfectly, the cells being shrivelled and very fatty. The liver also was very fatty. In the uterus fatty degeneration of the muscular fibres had distinctly commenced."

These cases seem to me of great interest as probably illustrative of the relations between albuminuria and its protean influences.

Case XCVII.—*Acute Laryngitis preceding Confinement.—Metro-Peritonitis.—Laryngotomy.—Autopsy.* (*Dr. Fisher, House Physician.*)

Anne Merwin, aged 21, first complained on Jan. 20th, 1862, of sore throat, and slight difficulty in respiration and deglutition, and on the 30th presented symptoms of a serious nature, viz. marked fever, pulse 152, marked aphonia, stridulous breathing, with tenderness on pressure over the larynx and trachea. Lungs and heart healthy. During that night she was taken in labor, and on the 31st the labor terminated naturally. Some lochial discharge followed for forty-eight hours, after which it never returned. At this time, Feb. 2d, she complained of pain over the region of the uterus, and over the exact sites of the femoral veins, but especially when the right was pressed upon. Bladder has had to be always evacuated by the catheter. Up to the invasion of the puerperal symptoms she had been treated by Dr. Thomas with diaphoretics, inhalations of steam, vesication, and leeches over the larynx; and the iodide of potassium had also been given. When she came under my observation she was in a profuse perspiration, with the tenderness over the veins just commencing. Ordered inhalations to be continued, the chlorate of potash to be substituted for the iodide of potassium, and eight leeches to be applied over the uterus, and the flow kept up by poultices. Vesp. pulse 152, restless—morphia and veratrum viride. Feb. 4th, 10 A.M., patient quiet, and comfortable, laryngeal symptoms have almost entirely subsided. At one P.M., the respiratory symptoms suddenly became so alarming that Dr. Fisher sent for Dr. J. R. Wood, who was then visiting his wards. Dr. W. recommended laryngotomy to be performed at once, and the operation was performed by Dr. Fisher. After this, the patient seemed to rally for a time, and pure oxygen was administered, but she died at five P.M.

Autopsy, sixteen hours after death.—Weather cold. Body well nourished, rigor mortis well marked. Milk in breasts. On opening the abdomen, the peritoneum was found to be quite dry—not congested—and presenting a small amount of fluid in its cavity. Intestines tympanitic, and when removed, the uterus was found to be of ordinary size, not contracted, flattened in its upper surface, from intestinal pressure in all probability. Posterior surface roughened by lymph, though the exudation was not extensive, or elsewhere apparent. Ovarian veins highly developed and full of blood. The femoral, external, common, and internal iliacs were then dissected, while the uterus was left in situ. None of them were hardened, but all were remarkably full of blood. There were no varicose veins recognised in the body. I now directed a large portion of each external iliac to be included between ligatures, and preserved with the contents for microscopical examination, which was carefully made by Prof. A. Flint, Jr., without discovering any evidences of inflammation. The uterus was now removed and laid open. No clots in sinuses. Lining membrane thickly covered with a puriaceous reddish grey material, presenting under the microscope broken down muscular fibre, granular matter, and pus corpuscles.

Fallopian tubes not enlarged, no pus escaped on sec-

tion. Epiglottis and aryteno-epiglottidean folds normal. Mucous membrane of larynx thickened, and presenting marked evidences of inflammation. The mucus removed and found normal, no traces of false membrane. Vocal cords thickened, and ventricles rendered shallow by thickening of mucous membrane. Mucous membrane of trachea and bronchi reddened. Other organs healthy—brain not examined—no evidences of syphilitic taint.

A thorough microscopic examination of the veins connecting with the uterus would assist materially in advancing our knowledge of metritis and puerperal phlebitis. In this case the pain over the veins disappeared after leeching.

Case XCVIII.—*Pelvic Cellulitis—Peritonitis, and Death from Escape of Pus into Peritoneal Cavity.*

During the autumn of 1861, a patient in the Lying-in wards of Bellevue suffered from pelvic cellulitis some time after her confinement. I made the diagnosis before the class, and stated that her chances for recovery were very good; recommended the iodide of potassium, which is a very favorite remedy of mine in cellulitis; and gave the customary prognosis, that if pus were to form it would probably discharge itself through the rectum, vagina, or skin, and obey the laws which guard the peritoneal surface so constantly from injury in these cases. Some days later, however, this poor woman was suddenly seized with violent peritonitis, and died, when the autopsy disclosed the fact that pus had formed and had made its way into the peritoneal cavity. The last twelve years have enabled me to observe a very great number of cases of pelvic cellulitis, the diagnosis of which was kindly taught me by Professor Simpson, in Edinburgh, in 1850, and this is the first case under my observation where this untoward accident has occurred. Decidedly the results of my experience make me believe that the vast majority of these cases do not require the trocar or the scalpel, nor in this case was there any recognisable fluctuation when my diagnosis was made.

Case XCIX.—*Feet and Funis Presentation—Still-born Child—Autopsy.*

Mary ——, single, aged 27, in labor in Bellevue, from Feb. 10, 1862, at 3 P.M., to Feb 11, at 3 A.M., under the care of Dr. Lowell, house surgeon. Female child, weighing 7 lbs., presented both feet, and when they were in the vagina, a large coil of funis prolapsed below the vulva. Dr. Lowell went instantly, but found no pulsation. Delivery easy. No respiratory effort made. I directed the autopsy fifteen hours after death before the class. Weather cold. Peritoneal, pleural, and pericardial surfaces healthy. Lungs in fœtal condition, free from disease. On carefully removing the skull-cap, without cutting the brain, ʒj. of dark bloody serum escaped. Brain firm and came out intact. Serous effusion to an abnormal extent in both ventricles, especially the left.

Case C.—*Delayed First Stage.—Undilatable Os.—Douche and Stimulating Enema.—Subsequent Death of Child proves to be due to Intra-Uterine Disease of the most extensive character.*

M. M. R., aged 18, married, came into the lying-in wards of Bellevue under the care of Dr. Segur, house surgeon, on Friday, Jan. 31, 1862. Had been kept awake the night before by the pains, which continued irregularly during the day. On entering, the os uteri was undilated, head in superior strait at the brim. In the night some hours' sleep were procured by an opiate, as no progress had been made. Feb. 1st.—Os dilated in the morning to the size of a quarter of a dollar. In the evening no further dilatation had taken place. Os thin and rigid. Patient restless; expression of great fatigue; pulse frequent. Ext. opii aquosi gr. ij; no effect. Chloroform then given moderately for half an hour, when she became quiet, and obtained some sleep; the morning of Feb. 2d found her quite refreshed. At 11 A.M. I saw her, and found nothing in the pelvis or presentation to cause delay. Os size of a dollar; undilatable and rigid. Pains irregular, but of considerable force. Ordered two gallons of warm water to be injected against and within the os, and ʒij. ol. terebinthinæ as an enema. Rapid dilatation followed. At 1 P.M. the membranes ruptured; uterine pains became efficient and frequent at 4 P.M., *before which time she remained quiet*, and in one hour afterwards the labor was over. Convalescence favorable.

The child was born asphyxiated; weight 4 lbs. 10 oz. Troy. Nothing had occurred in the second stage to account for its condition. Heart beats distinct for an hour, during which time some catching inspiratory efforts occurred, and were aided by various stimuli and the customary treatment, but respiration was never fairly established.

Autopsy.—Abdomen and scrotum distended. Superficial veins of brain congested; clots in the ventricles. Thorax, right side: Old pleuritic adhesions at apex of right lung. Lung so compressed by pleuritic effusion as to be little if at all crepitant. Surface of that lung seemed ecchymosed, and the appearances resisted water and insufflation. Left lung less compressed, there being a smaller amount of fluid in that pleura, not presenting the appearances of congestion observed in the other, and moderately crepitant. On opening the abdomen the cause of the swelling was seen to be due to serous peritoneal effusion. No evidences of lymph or pus. Some yellowish-white sub-peritoneal spots proved by the microscope to be fat. The microscope found no evidences of disease in the kidney. Each tunica vaginalis distended with serum, which communicated with that in the abdominal cavity. Nothing in liver.

It is probable that the apoplexy occurred after birth, during the respiratory struggle.

Progress of Medical Science.

NITRATE OF SILVER.

The *British Medical Journal* contains a notice of a paper read before the Obstetrical Society of London, by Robert Ellis, Esq., on the properties of Nitrate of Silver, with the description of a new instrument for its use in uterine disease. While the most opposite opinions are held by different writers concerning its escharotic properties—some denying them wholly, maintaining that it is only stimulant and astringent, and others asserting that it has the power of destroying structure and vitality in the living body, thereby producing a slough—the author inclines to the latter opinion, and describes the physiological action of nitrate of silver as possessing the power to destroy life and structure to the depth of its penetrating power, which, however, is extremely limited. It illustrates this by the experiment of dropping fluid albumen into a strong solution of the salt. The albumen instantly combining with the silver forms a dense, white, semi-solid substance; but on section it is seen that the penetration of the caustic has been very limited, the centre of the mass being unaffected by it. The same occurs when it is employed in surgery, a limited depth of structure only is killed. This is due to the abundant presence of the chlorides in the structure of the living body, which limit the action of the salt by the chemical affinity they have for it. Experiments made on the web of a frog, and the action of the caustic watched under the microscope, afforded conclusive evidence that destruction of tissue followed its application. A minute crystal was placed on the web, and at the end of from seventy to eighty hours the eschar separated, leaving a clean hole in it. No such result followed the application of cantharidine. The methods of rendering the stick cohesive by the addition of chloride of silver, nitrate of lead, nitrate of potash, etc., are pronounced failures, the substance soon becoming penetrated by moisture, thereby reducing its cohesive properties to that of the ordinary fused lunar caustic. The author's instrument was introduced some eight years ago, and consists of a short socket for the caustic down which a platinum pin passing

through the caustic is held and retained firmly by a small nut. It is thus impossible to break the stick, and the cervical canal can be cauterized to its highest point, without danger of leaving a portion of the caustic within the canal to produce misery and excoriation. The cover is perforated at the end, by which contrivance the caustic is always kept dry and clean, its moisture evaporating through the aperture. Mr. Ellis uses the perforated caustic in the form of cylinders and also of bullets, the latter form being considered the most useful in patulous conditions of the cervix.

The same journal contains the notice of a paper read before the Royal Medical and Chirurgical Society by Dr. George Harley on

JAUNDICE: ITS PATHOLOGY AND TREATMENT.

In this communication the author brings the various morbid conditions which give rise to jaundice under the two common heads of jaundice from suppression of the biliary function, and jaundice from the reabsorption of the secreted but retained bile, producing two totally different pathological conditions; and the treatment appropriate and beneficial in the one form would be detrimental or hazardous in the other. A simple method of distinguishing the two forms of the disease consists in analysing the urine. In jaundice from suppression, the urine contains only those biliary ingredients which exist preformed in the blood. In jaundice from obstruction, the urine contains, in addition to these, the materials generated in the liver itself, and which have been reabsorbed into the circulation from the distended gall bladder and ducts. A simple mode of distinguishing the two conditions, is to add to about two drachms of urine half a drachm of strong sulphuric acid, and a fragment of loaf sugar the size of a pea. If at the line of contact of the two liquids a scarlet or purple color be produced, it proves that the acids of the bile are present, and the case may be put down as one of jaundice from obstruction. If no bile acid reaction, but merely browning of the sugar be observed, the case is in all probability one of suppression. The employment of benzoic acid is recommended in the latter form of jaundice; and inspissated bile in that arising from obstruction, in which form the patient often dies from slow starvation, in consequence of the absence of bile in the digestive process causing imperfect assimilation of the food to take place. Bile, when given along with the food, instead of aiding the process of digestion, retards it by interfering with the action of the gastric juice. But when administered at the end of stomachal digestion, it acts on the chyme, and renders it fit for absorption.

PARTURITION WITHOUT PAIN.

The Lancet, May 24, contains a description of a new inhaler and anodyne mixture introduced by James Townley of Edinburgh. The inhaler is similar to one in common use, having in addition two tubes, an inch and a quarter long, and a quarter of an inch in diameter, running parallel to its floor, and placed above, and to the sides of the inspiring valve, so as to admit two small streams of fresh air, which to a great extent are inspired unmixed with the vapor of the anodyne. In place of the grating there is a curved prong for retaining the sponge under the right tube and opposite the hole in the right side connected with the cup which receives the mixture to be inhaled. The anodyne mixture is composed of alcohol, two ounces; aromatic tincture, one drachm; with sufficient chloroform added, short of the production of a turbid state of the fluid. The aromatic tincture makes it pleasanter to inhale, and also appears to prevent the sickness which would otherwise sometimes arise from long continued inhalation. The tincture is prepared with nutmegs, one drachm; cloves, two drachms; pterocarp chips, a drachm and a half; water, four ounces; alcohol, five ounces; mix. The object to be attained is to so far influence the nerves of sensation as to prevent pain, without producing unconsciousness. To effect this, the following directions are given: "The woman in the upright or recumbent position, as the case may be, holds the inhaler in her right hand. She is then directed to take a full inspiration, and to apply the inhaler to the mouth and nose. She is then to breathe rapidly for six, eight, or more inspirations (the inspirations and expirations being equal) only with the diaphragm and abdominal muscles, the chest being kept a fixture all the time. The inhaler should then be removed immediately, and one or two full, deep, quick chest inspirations taken. This will be found sufficient to relieve all pain, and there will be no loss of consciousness. During the whole process it is desirable to have a full light upon the face, to watch the countenance and feel the pulse occasionally, and to observe the pupils. These, in some cases, are very quickly affected, and thus the inhalation requires to be suspended for a time. During the time the process is going on, I am in the habit of giving a tea-spoonful of brandy in a cup of weak tea with plenty of milk, and something to eat; or instead, a glass of wine and a little cake or bread and butter, from time to time, to keep up the strength and prevent that sudden pallor of the face which sometimes occurs. I may add, as only a portion of the alcohol is taken up in vapor, it accumulates in the sponge, so that it is necessary occasionally to squeeze it out before adding a fresh quantity." Mr. Townley has now given the anodyne mixture in 216 cases without seeing any bad result, and after mentioning a number of instances in which the previous labors had been very severe or complicated, he concludes that —"1st. It is possible for a woman to be delivered with less pain from the beginning to the end of her labor than a rhubarb draught would occasion. 2d. It is possible to afford that relief without interfering with the regular and natural action of the heart or brain. 3d. It is possible for the child to be born without the mother experiencing any pain whatever, while at the same time she retains her consciousness and power to bear down when told to do so; and the first knowledge of the birth of her child shall be from hearing it cry. 4th. That when a woman is confined without suffering pain, although she shall have had inflammation after each of six previous labors, the prevention of the suffering will have the effect of preventing the usual inflammation. 5th. That by preventing the suffering of labor, the woman does not lose her strength, and always has a speedy recovery."

PREPARED BY DR. P. F. C. DESLANDES.

THE DIAGNOSIS AND TREATMENT OF HYDATIDS OF THE LUNGS AND THE PLEURA IN CHILDREN.

Prof. Henri Roger, Physician to the Children's Hospital, in a paper read before the Société Medicale des Hôpitaux, remarks as follows:—

The rarity of hydatids in children led me to think that this society would listen with some interest to the report of two cases of acephalocysts of the lungs and of the pleura which have lately come under my observation.

It is, we know, during youth and manhood that acephalocysts are most frequently developed, and the frequency of these pathological productions decreases gradually as we approach the extreme limits of life. Dr. Davaine has rightly said in his work (*Traité des Entozoaires, etc.*, Paris, 1860), "that hydatids are almost unknown in children," and has reported as exceptional facts two cases of MM. Cruveilhier and Bodson, the first, one of hydatic cyst which had emptied itself in the intestine, the subject a child twelve days old; the second, one of acephalocystic cyst of the liver in a young girl four years of age. Amongst the many cases of hydatids of the lungs or of the pleura collected by M. Davaine, and which represent almost the whole number of the cases registered in the annals of science, I could only find three which referred to young subjects, and yet these patients were respectively nine years old (case 60); ten years (case 83); and eleven years (case 29).

I will relate the two cases I have observed, and conclude with a few considerations on the diagnosis and treatment of hydatids of the chest.

Case I.—Intra-thoracic hydatic cyst, spontaneous evacuation through the bronchi, complete recovery.

Young P. was born June the 22d, 1848, Rue de La-

marche, in the Marais, of a mother whose health was impaired, and who suffered habitually from hæmoptysis. He was often affected with bronchitis during his first years.

It was during the last half of May, 1856, the child being then eight years old, that M. Descroisilles was called to attend him, under the following circumstances. The little patient had generally been treated, at his boarding-school at Charenton, by the physician of that place, who thought him consumptive. One of our masters in infantile pathology had been consulted in the month of March, of the same year, and his opinion, although expressed with great reserve, seemed to confirm this diagnosis. During the months of June and July, the cough continued with paroxysms sometimes so violent, that it became truly convulsive, presenting the characteristics of hooping-couch. Particularly at night, the dyspnœa was extreme, and the child was obliged to get up every moment and assume a semi-recumbent position on a sofa. The remedies used consisted principally of emetics, frequently administered, and in the application of several cauteries on the right side of the chest. There was considerable dulness in the lower half of this right chest.

On the evening of the eighth of August, after a slight apparent amelioration of the symptoms, following a last application of *pâte de Vienne*, young P., to whom an emetic had been administered in the morning, was seized with an inexpressible pain. He made very strenuous efforts to expectorate, and by dint of introducing, of his own accord, his fingers in his throat, he vomited up a considerable amount of matter, of a purulent aspect, and of an intolerable fœtidness, in which was imbedded a membranous fragment whose smooth and pearly surface gave the idea of an acephalocystic bag. Unfortunately this membrane was not kept.

On the 21st of August, 1856, I was called to see the child, by my friend M. Descroisilles, who was kind enough to give me the preceding history of the case. The description he gave me of the vomited membrane left no doubt as to the correctness of the diagnosis. The child had been considerably relieved by this spontaneous ejection, and from the 12th to the 18th of August he had appeared well enough for M. Descroisilles to remain six days without seeing him. On the 18th there had been a new exacerbation, there was a return of the convulsive cough, extreme anguish, particularly at night. After an emetic, on the morning of the 20th, after violent efforts, during which the little patient seemed threatened with asphyxia, there was expelled a much larger fragment of an acephalocystic bag. This time the hydatic membrane was preserved, and its whiteness, density, and structure showed positively its nature: we could not collect any liquid, and consequently were unable to ascertain if the bag contained any echinococci.

The condition of the child was afterwards much improved. The fever and dyspnœa, although persisting, had greatly diminished; the cough was less frequent and less painful, there was a greyish sero-purulent expectoration, of a peculiar fœtid odor, containing no remains of acephalocysts. The right side of the chest was manifestly dilated in its lower portion, there was dulness on percussion over at least two-fifths of that side, at the base, and the dulness extended to about the same level in front and behind. Throughout the whole of the dull region the vesicular murmur was wanting, and besides, a loud rhonchus was heard on a level with the right bronchus by M. Descroisilles at the time of the passage of the membrane, also a humid râle which gave a bubbling-like sensation, and compared by him to the large mucous râle met with in abundant hæmoptysis: besides this there was no souffle either cavernous or bronchial. The child never had any affection of the liver, and this organ occupied its normal situation, and had its normal dimensions, if we judge at least from the limits of its lower border.

Inhalation of the vapors of iodine was recommended, and used with perseverance for several weeks. From the 1st of September following, M. Descroisilles could pay less frequent visits to the patient, and he suspended them completely on the 23d instant. A few weeks after the second attack, he ascertained that respiration had become again almost normal on the right side. Convalescence has since progressed rapidly: it has remained perfect until the last few days, that is nearly five years.

About the end of July, 1861, the second case, which I shall relate presently, brought back to my mind this first one, and I then inquired from my confrère, M. Descroisilles, if the cure had been complete; when he had the kindness to give me the foregoing details. Shortly after we saw young P. at his boarding-school, and the following is the result of the examination then made.

The child is now thirteen years old, small, and still looks delicate; but his health is very good, he does not cough, has no pain in the chest, and plays and runs like his comrades. The thorax, carefully examined, presents no deformity, except that the right side is rather depressed behind, instead of the prominence normally larger in the hepatic region. Percussion practised at the base of the chest, gives out a natural and equal sound on both sides; the vesicular murmur, perfectly audible, is the same on both sides, and contrary to what happens long after the case of a chronic pleurisy, we find no trace of the grave affection under which the child labored five years before.

The most prominent point in this first case, is the cure, which was simple, remarkably rapid, and also that there has been no relapse for five years. In the following case, the disease, on the contrary, ended fatally. As its diagnosis and treatment presented more difficulties, the practical conclusions to be deduced from it will be better presented after the narration of the case itself.

Reports of Societies.

MEDICAL AND SURGICAL SOCIETY.

DR. WILKES IN THE CHAIR.

MEDICAL AND SURGICAL CASES.

STATED MEETING, Dec. 21, 1861.

(*Continued from page* 123.)

OPERATION FOR COMPLICATED HARE-LIP.

DR. PETERS related a case of operation for complicated hare-lip by Langenbeck's method. The child was five weeks old, and the fissure extended through the hard palate. The edges were pared so that an angular flap was left at the prolabium on one side to fit a bevelled surface on the other. The edges were kept in apposition by the pin suture, and the prolabial flap was united by pin suture to the opposite side. The advantage of this method is that the pouting cicatrix is avoided better than by Malgaigne's method. A brother of this child was operated on at the age of six weeks by Dr. Buck some years ago, and the fissure in the palate has since narrowed considerably.

KNEE-JOINT AMPUTATION.

DR. PETERS also alluded to a case of knee-joint amputation for necrosis of the tibia, that he had recently had at St. Luke's Hospital. The wound was united completely at the end of ten days, excepting in the track of the ligatures. Nearly the same result was obtained in a case operated on a year ago, at the same hospital. The patients were both boys, and both had extensive necrosis of the tibia.

COMPOUND FRACTURE OF TIBIA.—PLASTER OF PARIS SPLINTS.

DR. PETERS also described a case of compound fracture of tibia and fibula, with fracture of the thigh on the same side, in which he had derived great advantage from the use of the plaster of Paris splints. The wound in the leg was covered with collodion, converting the fracture at once into a simple one, no trouble arising from inflammation. The tendency to filling up of superior fragment was effec-

tually overcome by plaster of Paris splints placed above and below the point of fracture. This being accomplished, he was enabled to treat the fracture of the thigh by the elastic extension. The patient expected to have the apparatus removed in a few days.

DELIRIUM TREMENS AND CONVULSIONS.

Dr. Hinton related a case of delirium tremens, which he had recently attended, where the patient had several severe convulsions the night after he was called, but recovered so as to be quite well again the following day. Dr. Hinton thought delirium tremens patients who had convulsions rarely recovered.

Dr. Bulkley had repeatedly known them to recover.

Dr. McCready thinks such cases are generally complicated with uræmia, and in his experience are generally fatal. No examination of the urine was made in Dr. Hinton's case.

Dr. Agnew made some observations on the epidemic of measles that had lately occurred at the Military Hospital under his charge. There had been two hundred cases, generally in soldiers from the rural districts. The active period of the disease has been, as a general rule, unusually short, and there has been a marked tendency to the development of phthisis during convalescence. There has also been comparative immunity from abscesses of the ear: in two cases only out of two hundred. In eighty cases, seventy-eight had never had the disease before.

The Society then adjourned by limitation.

DR. ADAMS IN THE CHAIR.

Stated Meeting, January 18, 1862.

MULBERRY CALCULUS.—LITHOTOMY.

Dr. Peters exhibited a mulberry calculus which he had recently removed at the N. Y. Hospital from an Irish boy æt. 17. The father of the patient died of gravel. For three past years the patient had followed the sea, and for many years has suffered from an irritable bladder, especially in midsummer. During the last four months there has been great difficulty in urination. There had been hæmaturia but once; the urine contained earthy phosphates, pus, and a little blood. The stone was removed by the lateral operation. The dimensions of the stone were three and seven-eighths inches in its larger, and three and three-eighths inches in its smaller diameter. The weight was four ounces. The surface of the calculus was encrusted with a layer of triple phosphates. The calculus itself is made up of alternate layers of urea and oxalate of lime.

Dr. Elliot alluded to a post-mortem examination of a child under one year of age, in the pelvis of one of whose kidneys he found a calculus as large as four grains of rice.

Dr. Sands referred to a dissecting-room subject, in whom he found a uric acid calculus in the urachus, illustrating the intra-uterine formation of calculus.

FOREIGN BODIES IN TRACHEA.

Dr. Markoe related a case of forgign body in the trachea. The patient was a boy, to whom Dr. Markoe was called to prescribe for cough, which was at first not considered serious. It became very troublesome, however, and was accompanied with spasmodic attacks of dyspnœa. The chest was resonant on percussion, but there were some localized bronchial rales in the left lung. After suffering without relief for five or six weeks, he coughed up a piece of chestnut shell, which he remembered to have swallowed the "wrong way" shortly before the cough began to trouble him.

Dr. Clark related a similar but more remarkable case. His patient was a man, who, four years before Dr. Clark saw him, inhaled while laughing violently a piece of chestnut shell. Cough followed, and continued to annoy him until Dr. Clark saw him. There was no physical sign of disease except imperfect expansion of one lung. Shortly afterwards he had an attack of pneumonia, from which he recovered, though the cough still continued, until six years after the accident before mentioned he expectorated half a chestnut shell, encrusted with calcareous matter. He recovered completely.

Dr. Clark related another case of a boy who swallowed half a timothy head. He coughed constantly for six years, and finally died. The timothy head was found imbedded in a cavity in the centre of the lung, and the lung condensed around it.

Dr. McCready related the case of a girl who swallowed a bead one inch long, which passed into the larynx, and remained there or in the bronchi one year, producing paroxysmal cough and occasionally slight hæmorrhage. One day she coughed it up and swallowed it the right way, and it was afterwards found in the evacuations.

Dr. Buck related the case of a doctor, who in his youth inhaled a piece of cinnamon, which produced cough and hæmorrhage, and great emaciation and prostration of strength. It was finally expectorated, and the symptoms were entirely relieved.

DR. WOOD IN THE CHAIR.

Stated Meeting, February 1, 1862.

FRONTAL NEURALGIA DEPENDENT ON OXALMIA.

Dr. Elliot related a case of persistent frontal neuralgia, which had resisted a great variety of treatment in this country and in Europe. An examination of the brain detected the presence of a considerable amount of oxalate of lime. The patient, in view of this fact, was put upon the use of NO_3, and recovered rapidly and entirely.

SINGULAR CASE OF HERNIA.

Dr. Parker related a singular case of hernia. A young man, enjoying vigorous health, complained for the first time of severe abdominal pain around the umbilicus and in right groin, and some sickness of the stomach, on Monday morning. This not yielding to ordinary remedies, a physician was called, who regarded it as a case of colic, and treated it accordingly. The pain, constipation, and nausea continuing, Dr. Parker was called in consultation on Thursday. He found the patient with a rapid feeble pulse, cool surface, a somewhat tumid abdomen, with tenderness in the right hypogastrium, pain, singultus, and nausea with vomiting. On closer examination, an oblong tumor, soft and doughy to the feel, and somewhat discolored, was found extending from the external abdominal ring upwards and outwards on the right side three and a half inches towards the anterior superior spinuous process of the ileum. An examination of the scrotum showed that the testicles had never descended into their vaginal sacs. It was at once decided to cut down upon the tumor. The incision was made along the long axis of the tumor. Cutting through the integument and the common fascia, the tendon of the external oblique was divided, and the sac exposed as well as the right testis. The sac was reversed and extended towards the anterior superior spinous process. About ten inches of the ileum had escaped. It was very dark. The finger was passed in towards the internal ring, which was unusually deep, and the stricture torn with the finger. The gut brightened immediately, and was reduced without difficulty. The patient has probably done well, Dr. P. having heard nothing since the operation, three weeks ago.

PROLAPSED FUNIS.

Dr. Cock related a case of prolapsed *funis*, in which Dr. Thomas's method of reduction was resorted to without success. Dr. Elliot stated that success was not to be anticipated in this operation without manipulation, replacing the cord and maintaining it within the uterus until the head had become engaged, or the cord had been placed behind some projecting part of the fœtus.

American Medical Times.

SATURDAY, SEPTEMBER 13, 1862.

FEMALE NURSES IN HOSPITALS.

A visitor to our military hospitals can but be impressed with the disparity which exists in their general condition as regards cleanliness, order, and all the minor details of hospital economy. While one presents an air of general neatness and frugality, another exhibits only untidiness and waste. In the former order reigns in every department; the kitchen, the mess-room, the laundry, the wards, the beds, the entire furniture, and even the grounds about the building give evidence that a well trained head and a familiar hand control the Establishment. In the latter, confusion and disorder are seen in every quarter; the kitchen is dirty and offensive with foul odors, the mess-room and its disabled furniture are unclean, the beds are soiled, and the wards are filthy with the refuse which patients deposit under and around their beds. If we carry our investigations further, and inquire into the condition of those departments of these hospitals which are not open to observation, but on which the very vitality of the patients depends, the same differences appear, though in a form far more reprehensible. If in a hospital of the former class we examine into the preparation of the food, we shall find that every article is nicely prepared, and by skilled hands. The delicacies are served to the very sick in forms to suit their individual conditions, and stimulate an enfeebled appetite; the administration of medicines is punctual; the beds of the delirious are watched, and their linen never allowed to remain soiled. The very reverse of this is seen in the hospitals of the latter class; the food is so badly cooked as to be both unpalatable and indigestible; the medicines are irregularly administered; night-watching is altogether neglected; and the feeble, uncomplaining, or delirious, are left to die uncared for, and often in a most offensive bodily condition.

It does not require a lengthened inquiry, nor much penetration, to discover the cause of this radical and most essential difference in the military hospitals, now so important a branch of the public service. While it is true that the character and internal condition of a hospital depends much upon the efficiency and executive ability of the medical officer in charge, it is equally true that he cannot successfully manage it without skilled labor in many of its departments. In other words, no hospital can be properly managed without the aid of women. It will not be denied that in those departments where housewifery is the chief business, as in the kitchen, the laundry, and the mess-room, woman cannot be superseded by any more expert or skilful laborer. And yet we have military hospitals in the mess-rooms of which the handiwork of woman is never seen. The food is prepared as in camp, and is frequently more indigestible than before it passed the ordeal to which it was subjected by the cook. In these hospitals the food prepared for the convalescent is of such quality that a well man would become sick, if limited to it. The arrangements of hospitals thus deprived of the aid of woman in those departments to which the common duties of her sex assigned her, are in a most unfavorable sanitary condition. Miss Nightingale has well said: "The contrast between even naval hospitals, where there are female nurses, and military hospitals where there are none, is most astonishing, in point of order and cleanliness;" and again, "the woman is superior in skill to the man in all points of sanitary domestic economy, and more particularly in cleanliness and tidiness."

But we are prepared to go further, and assert that no hospital, civil or military, can be well managed that has not a corps of skilled female nurses. Nursing is as absolutely the peculiar province of woman as any branch of housewifery. The qualities of a good nurse are vigilance, discretion, and gentleness; and these are her special qualities. It is often alleged that women have not the physical capacity to endure the fatigue, and meet the emergencies of military hospitals; and again, that the character of the patients forbids her associating with them in the capacity of nurse. A sufficient answer to these, and all similar objections, is found in the testimony of those who have had practical experience. In the English hospitals, during the Crimean war, female nurses were employed, and gave great satisfaction. The Medical Director of the Civil Hospital at Smyrna states that it was due to the devotion of the female nurses that many severe cases of fever recovered. The present Medical Director of the British army strongly recommends female nurses in permanent hospitals, as the result of years of observation. The French Emperor has well trained female nurses, regularly organized, for military hospitals.

Our own Government early recognised the value of female nurses, and made provisiou for their employment. The following is a section of an Act passed by Congress, during its Extra Session :—

"*And be it further enacted*, That in general or permanent hospitals, female nurses may be substituted for soldiers, when, in the opinion of the surgeon-general or medical officer in charge it is expedient to do so; the number of female nurses to be indicated by the surgeon-general or surgeon in charge of the hospital. The nurses so employed to receive forty cents a day and one ration in kind, or by commutation, in lieu of all emoluments, except transportation in kind."

To give efficiency to this law, the Surgeon General issued the following Circular, regulating the appointment of nurses :—

CIRCULAR, NO 7.

Surgeon-General's Office.
Washington. D. C., July 14, 1862.

In order to give greater utility to the acts of Miss D. L. Dix, as "Superintendent of Women Nurses" in general hospitals, and to make the employment of such nurses conform more closely to existing laws and orders of the War Department, the following announcement is made for the information and guidance of medical officers and of all concerned :—Miss Dix has been entrusted by the War Department with the duty of selecting women nurses and assigning them to general or permanent military hospitals. Women nurses are not to be employed in such hospitals without her sanction and approval, except in cases of urgent need. Women nurses will be under the control and direction of the medical officer in charge of the hospital to which they are assigned, and may be discharged by him if incompetent, insubordinate, or otherwise unfit for their vocation. Miss Dix is charged with the diligent oversight of

women nurses, and with the duty of ascertaining, by personal inspection, whether or not they are properly performing their duties. Medical officers are enjoined to receive her suggestions and counsels with respect, and to carry them into effect, if compatible with the hospital service. As it will be impossible for Miss Dix to supervise in person all the military hospitals, she is authorized to delegate her authority, as herein defined, to subordinate agents, not to exceed one for each city or military district. Women wishing employment as nurses must apply to Miss Dix, or to her authorized agents.

The army regulations allow one nurse to every ten patients (beds) in a general hospital. As it is the expressed will of the Government that a portion of those nurses shall be women, and as Congress has given to the Surgeon-General authority to decide in what numbers women shall be substituted for men, it is ordered that there shall be one woman nurse to two men nurses. Medical officers are hereby required to organize their respective hospitals accordingly. Medical officers requiring women nurses will apply to Miss Dix, or to her authorized agent for the place where their hospitals are located. Sisters of Charity will be employed, as at present, under special instructions from this office.

WILLIAM A. HAMMOND, *Surgeon-General.*

It would seem, therefore, that the whole responsibility of appointing female nurses, and systematizing their operations, rests with MISS DIX. It is a legitimate subject of inquiry, why has not this most important duty been promptly and faithfully discharged? Many hospitals are suffering sadly from this neglect. We do not know what now occupies the attention of the "Superintendent of Women Nurses;" but we do not think she can render any service more likely to benefit the sick and wounded than the immediate appointment of the full quota of nurses to the various military hospitals.

THE WEEK.

WE alluded last week to the want of a systematized plan by which competent surgeons in civil life may be called to the aid of army surgeons in the event of a great battle. We are still more impressed with the folly of such a movement as that set on foot by the Secretary of War during the late engagements. Without consulting the Surgeon-General, and in entire ignorance of the wants of the service, the Secretary telegraphed to the mayors of the different cities to send at once all the surgeons willing to volunteer. The mayors, with equal indiscretion, summoned their medical acquaintances, some of whom were quacks, and gave them government transportation to the capital. To many it was a simple holiday excursion, and they improved it well. Twelve hundred surgeons (?) were soon thronging the streets of Washington, the guests of the government, with nothing to do but study the curiosities of that famous town. The rebels had possession of the wounded, and perhaps it was well for the latter, as they were permitted to die without the aid of "high surgery." The expense to government of this surgical raid upon Washington cannot be less than twenty thousand dollars!

We have suggested that a plan should be adopted which would enable the Surgeon-General (not the Secretary of War, who is presumed to know nothing of the preparations for the care of the sick and wounded) to call to the aid of the medical staff of the army such number of competent surgeons as he may deem necessary to meet the emergency. Let the Surgeon-General of each State be empowered to designate certain surgeons of eminence, who shall hold themselves in readiness, with a sufficient number of assistants, to respond at once to a summons from the Surgeon-General of the U. S. Army. In several States, such organizations were formed in the spring, and furnished an ample corps of practical surgeons during the Peninsular campaign.

—

THE *Richmond Co. Gazette* reiterates its warnings of an epidemic of yellow fever from the violation of quarantine:—"The statement made by us, and generally copied into the New York papers, was, that the ship was infected, as proved by the occurrence of cases on board at various intervals during a period of about forty days; the last case having occurred within a week, the same having died two days after admission into the floating hospital. That the vessel herself became infected by having moored near an infected vessel in the port of Havana, and that on arrival at New York she was placed in Quarantine at the anchorage opposite Tompkinsville, immediately in the track of our ferry boats, where she yet remains, to the great risk of thousands of the citizens of New York, who are daily brought within the influence of her pestiferous atmosphere. Now these facts were presented to show that the law requiring dangerous vessels to be anchored in the lower bay, is openly defied by the Health authorities of New York; and that while the health of Staten Island and Long Island is endangered by the course pursued, the city of New York itself, in consequence of the constant and unrestricted intercourse with the anchorage, is not protected from the possibility of danger. The denial, by the Health authorities, of the presence of cases on board this vessel, does not meet the case at all. The infected ships which, while anchored in Gravesend Bay in 1856, communicated the epidemic to Long Island, had no cases of fever on board. Vessels have frequently been the means of causing yellow fever on Staten Island, weeks after cases had ceased to appear on board. As our Health authorities will not understand this, it is necessary that the public should be rightly informed."

—

THE Academy of Medicine will commence its session on the 17th inst.; and, as will be seen by its list of papers and authors, its coming meetings will be full of interest. The high position which the Academy is yearly assuming among the scientific medical associations of this and other countries, should be a source of pride to the profession of New York. During the past year it made a more rapid advance towards an enduring scientific reputation than at any other period. The character of its papers and discussions was of a high order, and attracted attention and favorable comment in all medical circles. It is now about to issue the first volume of its Bulletin, which, we believe, will take rank among the most valuable publications of this kind. Under its new Constitution and By-Laws the proceedings of the Academy are most harmonious. There are still some slight defects in its organization, which will come up for consideration at a future meeting, and which will doubtless be properly remedied.

—

THE corps of volunteer physicians and surgeons from New York, who responded to the call of the Secretary of War, were placed in charge of the Capitol Hospital. After organizing it, in connexion with Surgeon JOHN MOORE,

they received from the Surgeon-General a complimentary note, stating that the number of wounded had been greatly exaggerated, and that he had no strictly professional labor for them to perform. He did not, therefore, feel warranted in longer detaining them from their homes and business, but requested the continuation of the organization for future services, if the exigency should occur. The volunteer corps responded by resolutions, returning acknowledgments for the courtesies of the Surgeon-General, and accepting the proposition to continue the organization. The Executive Committee of the organization consists of Drs. Wm. Detmold, John O. Stone, and Thad. M. Halstead.

We are glad to be informed from trustworthy sources that the inspection of recruits in the central and western part of the State is very efficiently performed. Not unfrequently the inspector has given half an hour to the examination of a single recruit. The greatest negligence exists where the U S. authorities undertake the inspection. An incompetent person obtains the appointment and little attention is given to the examination. Like other evils which afflict us, this seems to be past all remedy.

The treatment of diseases and deformities by scientific appliances is now carried to such perfection by qualified medical men, that we feel it a duty to encourage them by every legitimate means. In the manufacture of artificial limbs we have an accession in Dr. Bly, of Rochester, who a year or two since first introduced his limb, with lateral motion at the ankle-joint, to the profession of this city. He has now opened an office in New York. Dr. Henry G. Davis, who was the first to apply extension and counter-extension scientifically in the treatment of hip-joint disease, has improved upon his former splints by the manufacture of one which would seem to leave nothing to be desired in simplicity, lightness, and efficiency. Dr. Davis has opened a fine residence for patients in one of the pleasantest parts of the city, where those who remain under his care may have the comforts and quiet of a home.

Army Medical Intelligence.

REPORT OF DR. JOHN SWINBURNE, OF ALBANY, N. Y., ON THE HOSPITAL AT SAVAGE'S STATION, VIRGINIA.

Dr. Swinburne visited the Army of the Potomac, having a special commission from the Governor of this State, as "Medical Superintendent of New York State troops;" and also a contract with the Surgeon-General of the U. S. Army to co-operate with the surgeons on the field. He was ordered to report to Dr. Milhau, U.S.A., for duty at Savage's Station. His report will explain the nature of his duties, and how heroically he performed them.

REPORT.

I immediately complied, and ascertained that Dr. Milhau had received no instructions in regard to my duties. Hearing nothing further of said special duty, on the morning of the 18th I called on Dr. Tripler, who informed me that I was to establish a general hospital for the sick and wounded at Savage's Station, Va., of which I was to take charge. I was to make requisitions for all articles and material necessary for the construction and furnishing of such hospital. On the same evening I sent in a requisition for approval of seventy-five hospital tents, fifteen hundred stretchers, and other things in proportion. Late in the afternoon of the 19th, the requisition was returned, duly approved. On the same evening I visited the White House and superintended the filling of said requisition. On the 21st inst., the requisition not arriving, I sent a special messenger to the White House, who returned on the same evening with fifteen hospital tents and twenty stretchers. On the 22d, I made a requisition on Dr. Tripler for a detail of one hundred men, and a team for transportation. The requisition was partially complied with. I received thirty men, many of whom did not make their appearance until the 25th. I received no team whatever. With this limited force, we put the outhouses in as good order as possible; put up the tents, and converted our flies into fifteen more; making accommodations for about six hundred patients in all. On the 24th, Dr. Vollum (Med. Insp. Army) visited me, and promised to send me all the tents and accommodations he could. On the 26th, I received one hundred and fifty old A tents, which were intended to be used for the roofs of temporary buildings for hospital purposes. Finding the number of sick increasing so rapidly (being sent from division hospitals), I was obliged to cut poles, and put up shelter with these A tents as best I could. Before night they were full, and many were left without shelter. On the same afternoon many wounded were brought in from the right wing of the army, fed, and immediately transhipped to the White House, agreeably to orders. Those received during the night and the following days remained, with the exception of the few who were able to walk; these moved on to the James river with the army.

The following days (Friday, Saturday and the Sabbath), we received about fifteen hundred wounded. In my surgical labors, I was assisted by Doctors O. Munson, J. Underwood, C. H. Volees, Edmeston, Clark, Page, Hogan, Newell, Dueling, W. A. Smith, J. S. Smith, Fox, Sutton, Dongal, Perkins, Middleton, and Nordan. Subsequently Drs. Faulkner, Philips, Russell, Potter, Bromley, Phillips, Millner, Marsh, and Schell, arrived from other hospitals with their patients and assisted me. Drs. Tripler, Greenleaf, Smith, McClellan, and Milhau, assisted me very materially in the necessary surgery, and the general management of the hospital during this great and important crisis.

Late Saturday afternoon I was informed by Dr. Tripler that it would be necessary for me to remain there, inasmuch as in the course of a few hours the enemy would have possession, and that I must provide myself with food for at least one week: that he would give me an *ad libitum* order on the Commissary for stores to that end, which he did; that he would also give me a letter from Gen. McClellan to the commanding officer of the Confederate forces, explaining my position and his pleasure with regard to the wounded and sick.

In reference to the difficulty which now remained, to procure the transportation of food and hospital stores from the general commissary stores, I was unable that evening to obtain any detail, either of men or wagous, to make this transfer. Notwithstanding, I continued these efforts until twelve o'clock at night, and renewed them again at four o'clock in the morning. At 7 A.M. I had made but little progress. During Saturday evening, or early Sunday morning, I called on the proper authority (Gen. Williams), and begged that the general commissary stores should not be destroyed; or that I should be supplied with sufficient quantity before such destruction should take place.

Early Sunday morning I was rudely upbraided by Assistant Adjutant-General McKelver, of Gen. Heintzelman's staff, for not having already supplied myself with proper hospital stores. I applied to Quartermaster Wicks, in accordance with Special Order No. 186, who not only neglected to furnish the transportation, but insulted me in the grossest manner, as he had on a previous occasion; the facts of which were simply these:—After receiving my tents, and some other portions of my requisition, I found that portion which called for shovels, spades, and axes, had not been complied with, and that my detail of

thirty men were waiting for them. In order to accomplish my labors, I borrowed a few from Quartermaster King which belonged to Quartermaster Weeks, but which he (King) had mistaken for his own. Quartermaster Weeks treated me very unkindly at this time, and compelled me to return the few that I had, and keep my detail waiting nearly two days before I could obtain my tools on requisition. Finding it necessary to have operating tables, of which my hospital was entirely destitute (notwithstanding the requisition for such), and finding that Quartermaster Weeks alone had tools necessary to make them, I applied to him for them, and, after allowing my carpenter to make one table, he ordered them taken from him; and when spoken to in reference to this course, he answered: "The instruments are mine, and I have a right to do with them as I have a mind." And when told the use of the instruments was not a personal favor, but necessary for the wounded, he then ordered me out of his tent, hoping I would never "come back again," with many unpleasant expressions. I simply said I would return as often as my business called me there. But to Captain McKelvey and the other members of Gen. H.'s staff, I am indebted for many attentions.

During the forenoon of Sunday, I succeeded in coaxing and hiring a few men to take up a small quantity of commissary stores. About noon the ever generous General Sumner appeared on the ground, who, after hearing all the facts, sent a detail of one hundred men and supplied us pretty bountifully with food. Still we had no sugar nor tea, which could have been procured by transportation at a distance of less than one-fourth of a mile, and was of course destroyed with the rest of the commissary stores. In this way the day was consumed. General Sumner also saved me fifty hospital tents which would have otherwise been destroyed, and hence would have caused much suffering, inasmuch as there were then several hundred wounded lying on the ground without shelter, and these tents were required for that purpose. The next morning the enemy took possession, carried off our nurse and labor detail, and caused otherwise much confusion, so that the doctors were converted into nurses, &c., instead of exercising their proper vocation. In this way their valuable time was consumed, instead of attending to the necessary and proper surgical operations suitable at this period after injury. We were thus employed in performing duties which would otherwise have devolved upon cooks, nurses, hospital stewards, etc.

Sunday evening the forces of General Sumner were drawn up in battle array. Opposite to them and at right angles with the house (hospital) were the forces of the enemy. Obliquely from the house (hospital), and nearly on a line, was placed a Confederate battery, the first shell from which burst directly over the hospital, wounding one man slightly and frightening the others very much. The second shot burst just over the tents, killing one man by decapitation, and perforating the tent in many places. I then sent out a flag of truce with the following communication:

Gen'l Hospital, Savage's Station,
June 29, 1862.

To Commanding General } Confederate Forces. }

This is a hospital which contains two thousand sick and wounded, some of them being your own—one Col. Lamar of Georgia.

Very respectfully,
John Swinburne,
Surgeon in charge.

He replied as follows:

The hospital will not be fired into unless the advantage is taken of the flag.

A. Conrad,
A. A. Gen'l Conf. Forces.

Soon after I received a peremptory order from General Sumner "to come to (his) headquarters immediately," with which order I complied, and received a gentle but decided reprimand for presuming to send out a flag of truce without his order. Soon after a battle ensued, from which we received about thirty-five wounded, many of them mortally.

On Monday and Tuesday we were engaged in systematizing and making general arrangements for the comfort of the patients. On Tuesday, Gen. Stonewall Jackson, C. S. A., sent a messenger to ascertain our wants and necessities,—, I returned with the messenger, and had a conference with Dr. McGuire,* medical director Jackson's army; he informed me that we (the surgeons) were not prisoners of war—that we were free to go wherever we deemed our services requisite among the sick and wounded. He gave me a pass to visit the various hospitals where our wounded were situated, and learning that many of our wounded were lying on the battle-field of Monday, I returned on Wednesday with three ambulances loaded with food, and two surgeons, Dr. Edmeston of the 48th New York, and Dr. Underwood, Volunteer Surgeon, Massachusetts, leaving them at points where their services were most needed. I visited the battle-field of Monday, and found many of our wounded still on the field, and uncared for. I called on Dr. Mott, Medical Director of Gen. D. H. Hill's, C. S. A., who detailed Dr. Page, surgeon, C. S. A., who, with a corps of detailed men, removed all he could find to suitable places (small houses in the neighborhood); these were attended principally by our own surgeons, of whom there was a very efficient corps.† On visiting the battle-field of Tuesday, I found the house and barn of Dr. ——— contained several wounded, who had no medical attendance or food. I called on Gen McGruder, C. S. A., who, after hearing the facts of the case, sent some of our own men to attend them, as well as rations. In conversation with him in reference to paroling our wounded, he also suggested that I should communicate the facts of our situation and necessities to Gen. Lee, commander-in-chief, C. S. A., with which request I complied; the following is a copy of my letter:—

Gen. MacGruder's Headquarters,
Crew's House, Va., July 8, 1862.

Gen. R. E. Lee:—Sir—I am left here by order of Gen. McClellan [a copy of the order had already been sent to him], to look after the welfare of the sick and wounded, and since there are numbers of them placed in temporary hospitals extending from Gaines' house to the James river, a distance of about fifteen miles, and inasmuch as it is impossible for me to oversee and insure proper attention as to medication, nursing, and food, I would therefore propose that some suitable arrangement be made either for concentrating them at Savage's and other stations, that these ends might be obtained, or what would be still more agreeable to the demands of humanity, namely, the unconditional parole of these sufferers.

From what I learn of your ideas of humanity, I feel assured (even if the Federal Government do not recognise the principle of mutual exchange) that this rule will not be extended to the unfortunate sick and wounded. The real prisoners of war should be treated as belligerents—while humanity scruples at the idea of putting the wounded on the same footing. Your surgeons have performed miracles in the way of kindness both to us as surgeons, as well as to the wounded. If this proposition does not meet with favor, I will, with your permission, communicate with the Federal Government, that some basis of transfer may be arrived at. The majority, in fact all the medical directors of your army with whom I have conferred, fully agree with me as to the humanity of carrying out this proposition. My object in asking an immediate answer and parole is, that time should be saved, and that the sufferers

* I believe it is to Dr. McGuire that we are indebted for the following presentation with regard to paroles from the ordinary usages of war.

† The names of Surgeon Robinson, McNeil, Dandridge, Atkinson, Chenault, Conrad, Cunningham, and [illegible] were [illegible] as [illegible] surgeons.

should be released more speedily. Hoping to hear from you soon,

I remain respectfully yours, &c.,
J. SWINBURNE, *Surgeon in charge.*

To which Gen. Lee returned the following answer:—

HEADQUARTERS, ARMY N. VA., July 4, 1862

SIR:—I regret to learn the extreme suffering of the sick and wounded Federal prisoners that have fallen into our hands. I will do all that lies in my power to alleviate their sufferings. I will cause steps to be taken to give you every facility in concentrating them at Savage's station. I am willing to release the sick and wounded on their parole not to bear arms against the Confederate States until regularly exchanged. But at present I have no means of carrying such an arrangement into effect. Certainly such a release will be a great relief to them. Those who are well and in attendance upon the hospitals, except those who were left for the purpose, could not be included in such an arrangement, but must be sent into the interior as prisoners of war until regularly exchanged.

Very respectfully your obed't servant,
R. E. LEE, *General.*

DR. J. SWINBURNE,
Acting Surgeon in charge.

Being now nearly eleven o'clock at night I returned to Dr. ——'s house and stayed for the night. In the morning I visited the various farm-houses about the battle-field of Tuesday, and found that all the wounded had been removed to Malvern Hill (overlooking James river) where, as I learned, they were well cared for. While passing Gen. McGruder's head-quarters, Dr. Guild, C. S. A. Medical Director, handed me the following note.

"MALVERN HILL, *July* 3, 1862.

"There are several cases which are needing capital operations, and which are of the latest date. Shall they remain there to be operated on? If so, further aid will be needed to continue the preparations for the removal of the others, as our time will be fully occupied. Can we possibly have further aid? If Dr. Swinburne can come (I hear he is in the vicinity) I would like it, or some other Federal surgeon.

"I judge by this time some of them at Savage's Station must be at leisure.

"Resp'y sub.,
"C. B. WHITE, *Ass. Surg. U.S.A.*
"To MAJ. GEN'L MCGRUDER, *C. S. A.*"

In compliance with this request, I repaired to Pitt's house. I stayed with Doctors White, Chamberlain, and Jewett, that day and part of the next, performing all the operations necessary at this period. Returning to the field of Monday, I was informed by some of the Confederates that some of our wounded were in a dense forest near by. Upon visiting the place, I found several in the position indicated, all of whom had been fed, and water given to them by the Confederate soldiers. I caused steps to be taken to have them removed immediately to a place where they could be cared for. I again visited the neighboring hospitals, found the surgeons U. S. A. were attending to their duty faithfully, and returned the same evening to Savage's Station, where I found my patients doing well; but my nurses—what few remained—pretty thoroughly worked out. In this connexion, I wish to make special mention of my *volunteer* corps of nurses; which consisted of Mr. Brunot, and several nurses from Pittsburgh, Pa.; Rev. Mr. Reed, Washington, D. C.; and Mr. Howell of Chicago. These gentlemen assisted in the organization of the hospital, superintending the cooking and dispensing of food, as well as all those little things which belong to a hospital steward, and the general management of a hospital. Up to this time, and for some days afterwards, the Confederate authorities had neglected either to return the nurses that they took from us at the time we became prisoners, or send us others. This neglect on their part not only increased our labors, but rendered the wounded less comfortable, and in some instances proved fatal.

(To be Continued.)

Correspondence.

FOREIGN CORRESPONDENCE.

LETTER X.

BY PROF. CHARLES A. LEE.

LONDON, July 20, 1862.

HAVING devoted considerable time of late in visiting various Lunatic and Idiot Asylums, and other public institutions, I will present a notice of some of the more important.

One of the pleasant excursions which I made in company with the members of the "Social Congress," was to "Earleswood," near Reigate, Sussex, to visit the asylum for idiots, established in 1847, through the efforts of the Rev. Andrew Reed, D.D., well known and highly honored in the United States.

The edifice is very large and handsome, highly ornamented, and extremely well adapted to the object for which it was erected. It is situated in a very picturesque and undulating region, under the highest cultivation, and adorned with the most tasteful mansions, villas, gardens, parks, and cottages. An extensive and beautiful lawn slopes gently away from the front entrance, interspersed with beds of flowers in full bloom, and large shade trees, while the grounds and farm lie on the right hand, laid out with excellent taste and with real simplicity of style. Great and successful efforts have been made to throw an air of cheerfulness around this beautiful home of the poor imbecile—this model English asylum—which cannot fail to exert a most favorable influence in meliorating the condition of the weak-minded and idiotic, and stimulating his feeble powers both of mind and body. No finer situation for a building could, perhaps, have been found, and art has done as much as nature to beautify the place. Even its proximity to the railroad, and the frequent passing of the trains, tends much to enliven the scene and give a degree of animation to the place, which is not without its effect on the inmates. The main building stands apparently on a terrace, raised considerably above the adjacent grounds, having a fine, imposing entrance, with an extensive wing for the males on one side and for females on the other, and commanding an extensive and beautiful view. On entering we pass at once into a large, lofty, and well ventilated hall, kept with the utmost neatness. On the left is the large reception room, its walls ornamented with drawings the work of the pupils, many of them displaying a very cultivated taste and practised hand. It has been truly said that the repositories of the work of the blind and the idiot manifest greater advance of our age than galleries of the highest art and most gifted ingenuity. Under the guidance of Dr. Down, the able and gentlemanly resident physician and superintendent, we were conducted throughout the building, taking on our way the spacious and airy dining hall and the play-rooms for the various classes, all of which were well furnished for their respective purposes, which were fully, and in detail, pointed out. The inmates are carefully classified, each individual being assigned to one of this series of rooms according to apparent mental power. Amusements are provided also for all, according to capacity, and with special suitability to awakening the dormant faculties. In this way companionship is cultivated and cheerfulness promoted. There were six classes in all, being graduated according to mental development. Here various games are constantly going on, in which a lively interest seems to be taken, thus stimulating the latent powers into activity. There was an air of comfort, and even happiness, in the inmates which was quite unexpected, while the features were often lighted up by intelligence and feeling. The games and amusements pursued in these rooms are of a quiet kind; while in the basement there is a large play-

room for wet days, where foot-ball and ninepins are played. Out of doors I noticed abundant provisions for cricket, skittles, and swings, as well as all kinds of healthy gymnastics. Experience has fully established the fact, that the true way to develop the intellect of an idiot is to begin with the bodily faculties; for as soon as these are quickened and improved the long-latent mind gradually appears, and the obvious reason is that these regulated bodily exercises imply the exercise of will and attention, of memory and judgment, which, by frequent acts of repetition, become gradually developed and strengthened. The mind of an imbecile seems to be veiled by an imperfect, defective organization, and a consequent feeble and deranged nervous system; and as soon as these are improved the mind proportionately beams forth.

It is unnecessary here to point out the different lessons and modes of instructing the idiotic, as they are generally sufficiently well known.

Object lessons are those generally employed, and a museum of natural curiosities serves as a most important and valuable aid. The great desideratum is to create an interest, to awaken attention, and that is successfully attained by lectures with illuminated figures of animals, dissolving views of places, and astronomical and other diagrams and objects of natural history shown by powerful lanterns. We next visited the workshops, into which the inmates are introduced as soon as is deemed expedient, and in which they soon find great gratification. Some of the younger and least advanced were picking fibres from the cocoa for mats, all of which covering the floors were made in the institution. This is an excellent discipline, as it teaches them to sit still, while they, at the same time, employ their hands in useful work; thus awakening attention, eliciting regulated bodily movements, and gradually evolving the mental and bodily powers. Considering that all their motions have heretofore been involuntary, it is by no means strange that their will is dormant, as well as all their other faculties, and that such simple means as picking cocoa-fibre should prove such an excellent discipline and means of improvement. The only wonder is that teachers can be found having sufficient patience to instruct such dull and slow learners. Plaiting the cocoa-fibre is the next step in discipline after picking it, and this requires a higher cultivation of the physical and intellectual powers. The fingers have, by this time, acquired the habit of obeying the will, and so we have figured hearth rugs of pretty patterns turned out, and strong and good mats made which have no marks of inferior workmanship. Regular and well directed diligence marks the conduct of the more advanced classes, while their features assume more the expression of intelligent beings. In other rooms I saw tailoring and shoemaking being carried on with a very creditable degree of skill; also basket-making, carpenters, etc. There is a large and beautiful model of a man-of-war, with all its masts, rigging, portholes, etc., made by one of the inmates; every part being arranged and completed with consummate skill and accuracy. The pupils are placed in the different shops, according to the trade for which they manifest the greatest inclination, after being allowed for a time to be lookers-on. They are thus led on, step by step, every success leading to further improvement. What can be more delightful to a human mind than to see a poor idiot showing, with apparent pride, the fruits of his own industry, while he is comforted and encouraged by its being inspected and by a few words of judicious praise?

Although I did not notice, what a recent French writer speaks of having witnessed in a similar institution in France, viz. a little vehicle containing two paralytics drawn by two imbeciles, children, and pushed from behind by two that are blind; yet I saw many hand carriages for cripples unable to walk, and drawn about the grounds by their companions.

The dormitories appeared well ventilated and very neatly kept; the sheets and counterpanes were white and clean, and everything bore marks of the utmost neatness and cleanliness. The present number of pupils is 320—227 males and 93 females; and their general appearance, health, cheerfulness, and activity, gave the most satisfactory evidence of the bodily and mental care taken of them. I do not see how the sanitary arrangements of the establishment could be improved; nor is it easy to perceive how any better expedients could be adopted for eliciting observation, or training to habits of order and usefulness. The methods employed to teach by cabinets of objects in common use, their form, color, taste, smell, size, weight, and use, were extremely happy and judicious. Nothing, in fact, seems wanting for the instruction and comfort of the inmates. The corridors are decorated with plates, paintings, and engravings, with singing birds in ornamental cages; glass globes containing gold-fish are suspended, and the windows enlivened by baskets of flowers and ferns. Scrap-books filled with prints lie on the tables, and numerous toys are always at hand. I should have stated that as we approached the building, the male and female pupils, in separate columns, each holding a handsome flag, were marching down the lawn in the highest glee, to the music of a splendid instrumental band, composed of the officers and attendants of the institution; it was a beautiful and impressive sight.

There were numerous hopeless cases in an upper portion of the building; but it is a question whether such asylums as these should not be entirely appropriated to such as promise more or less hope of amelioration. Christian benevolence should provide homes for the hopeless insane and idiotic, apart from institutions designed for their cure or relief, as the presence of such exerts an unfavorable influence upon the others. There are many admirable expedients resorted to here for the development of the faculties which are worthy of special commendation, such as playing at shop-keeping, the pretended shop being furnished with rice, nuts, marbles, etc.; some of the pupils acting as customers and some as venders. The customer being supplied with coins of different value, makes his purchases and receives his change, thus becoming acquainted with the value and use of money, while the memory, faculty of speech, attention, etc., are all strengthened. Improvement in speech is also aided by the cabinet of objects, the utterance of the names of which includes all the sounds of the English language.

The exercises of drill are varied, lively, and arranged so as to induce care and rapidity of movement, ready obedience to the word of command, and attention to time and tune. There are also classes for teaching the process of dressing and initiating the pupils into all the processes of tying, buttoning, putting on and off the different garments, etc. The girls are taught needlework, some use the sewing machine, and others are employed in household work. Several boys taught in this establishment now support themselves as mechanics. The garden and farm of over 100 acres offer very excellent and varied employment, adapted to different intellectual grades, and affording a sphere of occupation for many whose health would be incompatible with indoor work. A farm seems essential to a school like this, inasmuch as it affords healthful employment, recreation, and country walks, without intruding on the notice of the neighborhood. A large stock of cows are kept; many of the pupils have been taught to milk, while others prepare the fodder and attend to the cleanliness of the animals. So far as I could learn from a single visit, perfect order and system prevail throughout the entire establishment, which is furnished with all the conveniences and appliances to promote the health, comfort, and improvement and happiness of the inmates, and may, with truth, be pronounced the *Model Idiot Asylum*, not only of England, but of the world.

Suicide in France.—A curious calculation respecting suicides in France has just been published. It shows that the number of suicides committed in France since the beginning of the present century is not less than 800,000. —*Brit. Jour.*

Original Lectures.

COURSE OF LECTURES
ON
DENTITION AND ITS DERANGEMENTS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL
IN THE PRELIMINARY COURSE.

Session 1860-61.

Lecture XIII.

By A. JACOBI, M.D.,
PROF. OF INFANTILE PATHOLOGY AND THERAPEUTICS.

Therapeutics of Dentition.—Means of Alleviating Dentition.—Scarification of the Gums.

It has been the object of my lectures to prove that dentition is neither a disease nor a direct cause of diseases, except in very rare cases. I believe I have shown that all those diseases of the cutaneous, circulatory, respiratory, and nervous organs, generally attributed to dentition, are in no, or very loose, connexion with the physiological process of teething; that further, pathological occurrences cannot, in themselves, be accounted for by a simple and undisturbed physiological process; and finally, that disturbances are very rare indeed. It is, therefore, at least superfluous to more than mention these facts, as they are too fresh in your memory to require more than a mere reference to my former lectures. Now, if dentition is no disease, what right have I to speak of the therapeutics of dentition? I answer myself, that I have none. The diseases we have reviewed with each other, which were said to depend on dentition, require a treatment of some kind. But you have learned that their presumed dependency on dentition had not the least influence on their treatment. Thus we cannot even say that dentition, as it has not the slightest effect on the nature of those diseases, the etiology of which may be very complicated, has certainly none on their treatment.

Thus there is no treatment of dentition as such. Whatever treatment has been resorted to, has even in former times been very rarely of a general character. We should have to except from this general remark the common practice of purging by remedial agents such children as would not suffer from diarrhœa during the protrusion of a tooth or a group of teeth. But there are a number of local contrivances that have been resorted to, partially for the purpose of curing such diseases as were considered the consequences of dentition; partially, however, for their prevention. Among the latter I comprehend the articles prepared from leather, wood, bone, India-rubber, which are destined to help the little ones in the work of the gradual absorption of the gums, or to relieve whatever annoying sensation they have or are supposed to have. I do not think that they can hurt, at all events I am not afraid of the inflammation which several authors suppose to follow the frequent use of these things. As to other means of alleviating or escaping the sufferings of dentition, every country, both civilized and barbarous, has invented its own; and what the instinct of the people did not furnish, has very frequently been sinned by those who ought to have known, and taught, better. According to Dr. Magaziner, the inhabitants of the regions around the Caspian Sea fill a quill with metallic mercury, and envelop it in a piece of leather or a woollen rag, in order to influence the secretion of milk in the female breast. Suspended over the chest, it is believed to increase the amount of milk, while it is believed to decrease when the metal is suspended on the back. This popular belief Dr. Smirnoff has attempted to transfer into practice and science on quite a different territory. He applied the same contrivance in cases of "difficult dentition," and succeeded so well, that he instantaneously made his discovery public. Up to this time the world has proved ungrateful. The modern Greeks, as we learn from the communications of Pr. Landrer, of Athens, to the Archives of Pharmacy (Oct. 1851), alleviate difficult dentition, and accelerate the protrusion of teeth, by daily frictions of the gums with the fresh brain of hares. A number of curious facts of a similar nature could be collected, if it was worth while in a time when the brain of medical persons is still overtaxed to excel by some unexpectedly clever invention of their own. I have availed myself of some former opportunity to speak to you of Dr. Delabarre's Dentition Syrup, by which not only the tickling sensation of the gums of teething children is removed, but at the same time the immense number of diseases following this tickling sensation is prevented. It ranks with the numerous nostrums of the newspaper advertisements, and will, I hope, be forgotten with them.

Of the treatment of such diseases as have been believed to depend on dentition, I have spoken at different times, at the same time when I took some pains to elucidate their etiology; the measures for the purpose of preventing disease, by protecting the infantile organs, and by a proper diet, further, the measures for securing easy dentition, by securing general health, have repeatedly been the subject of our conversation. There is, however, one of the numerous means used for the purpose of alleviating dentition and curing dental diseases, on which I feel both bound and inclined to make a few remarks, viz. scarifications of the gums for the purpose of allowing a more rapid protrusion of a tooth, and thus affording protection or recovery from dangerous dental maladies.

Scarification of the gums has been practised for hundreds of years. Ambrose Paré lanced the gums of his own children. Harris, Van Swieten, and others, practised the same operation, but never before the gum would be stretched and prominent over the tooth, leaving its alveolus. They were of the opinion that the premature performance of the operation would be followed by a cicatrix of so solid a character that at a later time the tooth would find serious difficulties in piercing the gums. Benjamin Bell, however, and Richter, assert that deferring the operation until the period mentioned renders it entirely unnecessary; for the derangements following difficult dentition are perceptible before the piercing of the gums; therefore the gums must be lanced early in order to encounter the dangers of difficult dentition; if the incision were made prematurely, it might be repeated. Richter, moreover, believes the usefulness of lancing the gums to consist in the hæmorrhage produced by this operation. Others advise to delay its performance until other means to check or remove morbid symptoms have failed. Girtanner praises it as the safeguard of many children who would have been lost without it; Camus, however, declares it to be both useless and injurious; he also doubts if the convulsions so generally attributed to the influence of difficult dentition really depend on the presumed cause.

The methods of the operation that have been recommended are just as various as the opinions concerning its value. One makes a single transverse incision, the other, a cross incision; others act in the former manner over the incisors, in the latter, before the appearance of the molars. Boyer removes the whole portion of the gum as far as it covers the tooth, attempting in this manner to avoid the rapid reparative process generally following the operation, which is of such power and rapidity that Hunter was compelled to scarify ten times for the very same tooth. Again, others report that a single transverse incision is sufficient to remove very severe symptoms. This observation has particularly been made in cases of convulsions, which sometimes would not return after a sufficient incision. Mombert urges this fact, but at the same time advises not to lance the gum before the tooth is really ready to pierce it. His reason for this advice is the solidity of the cicatrization. He often repeats the operation, but is averse to cutting to any depth. In his opinion it becomes but rarely necessary for the incisors, more frequently for the molars,

most often for the canine teeth; because in these the gums, from their pointed and conical form, are still irritated after the sharp crown has commenced penetrating. The incision is to be made without hesitation where, with the presence of dangerous symptoms, the teeth show their white color through the gums, when these are extended, hot, and swelled, when the infants cry constantly, where soothing applications to the gums have been unsuccessful (such a soothing application is said to be: mel. rosar. ʒ ij; succ. citr. ʒ j; aq. amygdal. amar. ℥ ij), and where the general symptoms have not given way to the generally known remedies. If the symptoms are no less after the incision, or return after hours or days, the operation must be repeated; suppuration is very seldom observed. Unless, however, a third incision removes the morbid symptoms, there must be other causes for them. Thus, the author makes incisions where the symptoms were not removed by the generally known remedies; and where incisions will not help, he concludes that dentition is not the cause of the symptoms, and probably returns to his "generally known remedies." What they are is not known to us. A curious manner both of diagnosticating the nature of an ailment, and of curing it.

The most emphatic eulogizer of the scarification of the gums is Marshall Hall. I cannot do him more justice, nor prove more impartial, than by quoting his very words. He says:

"There is no practical fact, of the truth and value of which I am more satisfied, than that of the effect and efficacy of scarification of the gums in infants, and not in infants only, but in children. But the prevailing, I may say the universal, idea on this subject is, that we should lance the gums only when the teeth are ready to pierce through them, and only at the most prominent part of the gums, and as the occasion to which I have referred may require; and no idea of this important measure can be more inadequate to its real value. The process of teething is one of augmented arterial action and of vascular action generally; but it is also one of augmented nervous action; for formation, like nutrition, secretion, etc., generally, is always a nervo-vascular action; and of this the case in question is, from its peculiar rapidity, one of the most energetic. Like other physiological processes, it is apt to become, from that very character of energy, pathological, or of morbid activity. It is obviously, then, attended with extreme suffering to the little patient; the brain is irritable, and the child is restless and cross; the gums are tumid and heated; there is fever, an affection of the general vascular system, and there are, too frequently, convulsions of various degrees and kinds, manifested in the muscles which move the eyeball, the thumb and finger, the toe, the larynx, the parietes of the respiratory cavities; and the limbs and frame in general, affections of the excito-motor part of the nervous system, and of the secretion of the liver, kidneys, and intestines, affections of the ganglionic division of that system."

"It is to the base of the gums, not to their apex merely, that the scarification should be applied. The most marked case in which I have observed the instant good effect of scarification, was one in which all the teeth had pierced the gums. Better scarify the gums one hundred times unnecessarily, than allow the accession of one fit of convulsions from the neglect of this operation, which is equally important in its results, and trifling in its character. And it is not merely the prominent and tense gums over the edges of the teeth which should be divided; the gums, or rather the bloodvessels, immediately over the very nerves of the teeth, should be scarified and divided. Now, while there is fever or restlessness, or tendency to spasm, or convulsion, this local bloodletting should be repeated daily, and in urgent cases even twice a day. A skillful person does it in a minute, and in a minute often prevents a serious attack; an attack which may cripple the mind, or the limbs, or even take the life of the little patient, if frequently repeated. There is, in fact, no comparison between the means and the end; the one is trifling, and the other so momentous."

"There is a phrase among nurses, viz. the breeding of teeth, which may be taken as evidence that *before* the teeth actually reach the borders of the gums, they may prove the source of much irritation."

Where "a phrase among nurses" is taken as "evidence," or where every case of convulsions is attributed to the process of dentition, because now and then a fit will occur in consequence of some irregularity in the protrusion of a tooth, we may have to expect such practice as recommended in the quotations you have just been listening to. It is true that a simple incision into the gums is generally not at all a dangerous thing, but to repeat the same operation to such an extent, to again and again lacerate the gums, appears both cruel and absurd. Moreover, Marshall Hall's own countrymen report cases of scarification of the gums made after his fashion, after which copious hæmorrhages, suppurations, and ulcerations would take place. Not to speak of this fact, that all authors recommending frequent scarification were at the same time opposed to repeating it too frequently in rhachitic and scrofulous infants; but you know, that just these are the very ones who are most subject to the symptoms of what they call difficult dentition. Not to speak of the further fact, that the practice of lancing the gums where you wish to avoid the trouble of making a diagnosis, and of stopping to lance when you see no success, and therefore suspect some other cause of the morbid symptom, is unscientific and unworthy. Marshal Hall affirms never to have lost a child from difficult dentition—the greatest recommendation for his surgical cure of both difficult and easy dentition. I may state the same result of my own practice among teething infants, viz. that although I hardly make more than ten or twelve scarifications of gums in the course of a year, I have also never lost a case from "difficult dentition."

I see very few indications for the lancet during the period of dentition. You may cut where the gums are an impediment to the protrusion of a tooth, or where the gums themselves are the seat of a disease giving rise to general symptoms, especially of the nervous system. Thus, inflammation of the gums justifies an incision, for the sake of relieving the tension of the tissue; the same practice is followed in inflammations of the tongue, of the fingers, etc. Even mild cases in very irritable children may be treated in the same manner. But the incision itself, especially when repeated, may be a cause of irritation, sometimes visible in the fact that during the prevalence of follicular or other stomatitis the gums will be found covered with superficial ulcerations. I need not add, that while exudative processes, such as diphtheria, are active in the system, every wound of this description will give rise to new diphtheritic deposits. I, then, scarify the gum in cases of intense local hyperæmia and inflammation: these are the cases in which the loss of a few drops of blood, which have no effect on either the healthy or the diseased system in general, is decidedly advantageous. I should scarify, and have done so, several times during my practice, in cases of convulsions in tender, delicate, irritable patients, in whom I found the gums swollen, and where a correct diagnosis could not be made instantaneously; especially in such as had been once relieved by the same operation; for I must confess that once or twice in my life, not oftener, I have observed the instant termination of an attack of convulsions after I lanced the gums. But always be sure that the tooth is near the surface. I know that new cicatrices will easily tear, but old ones will not; and I have seen real trouble arising from teeth that had been cut weeks before they were ready to pierce the gums; if you mean to call it a piercing, for under normal circumstances the process is one of slow absorption of the gum. I have known cases in which practitioners had lanced the gums two or three months before the final appearance of the tooth, a practice which is annoying, or useless, or dangerous to the child, and certainly not indicative of much diagnostical power and therapeutical know-

ledge in the doctor. It is not even uncommon to find a retardation of the protrusion of a tooth where you expected its daily appearance. A child becomes sick, with the symptoms of fever, and some local symptoms which you will or will not diagnosticate, according to your accomplishments as a diagnostician. You lance the gums, and expect not only the appearance of the tooth, but also a termination of the untoward symptoms. Nothing of the kind occurs. To the contrary, the child gets thinner and sicker, and no tooth. Where the system is intensely suffering, where emaciation takes place and nutrition is interfered with, it is but natural that the growth of a tooth should also stop. In such cases you may safely predict that no tooth will appear before the child will get well, or at least better. During convalescence the tooth cuts. You say that it made its appearance after the organism had been sufficiently restored to allow of phosphate of lime being spared for the building of teeth; the mother says, that because the child was well when the tooth came and was through, the child suffered from its tooth. You say, the child cut a tooth, after it was well enough. She says, it got well after it cut a tooth. Certainly there are difficulties in teething, but during, not from.

In one of my first lectures I have spoken of the direct injury done to the tooth by incisions. The consistency of the tooth is the less the younger the child; and the harm done to a tooth by the effect of a hard and sharp instrument cannot be denied. If you expect to effect anything by an incision, you must be sure of dividing it down to the tooth. But you can scarcely avoid injuring the tooth in cutting down upon it. If this danger exists, and it does exist, it is the more to be feared from those often-repeated scarifications recommended by Marshall Hall, and others. Thus while your incisions are of no use in the present, they are positively injurious to the future. There is something absurd and unworthy of the high standing of our profession in performing any, though slight, operation, which is useless; but it is a revolting thought to perform one that is worse than useless, viz. injurious. It is unworthy of the high vocation of our profession to resort to an action which gives the impression to the relations of the little sufferer, that not only something has been done, but that the right thing has been done, and which, nevertheless, is destined, in most cases, to cover the want of a diagnosis, and the ignorance regarding the causes of the disease. The language of disease in infantile life is intelligible enough. It is your province to listen to it, and to understand it.

Vaccination in Bengal.—In this presidency there were 14,874 persons vaccinated, out of which number there were 13,231 successful cases. In the Barrackpoor division there were 41,259 persons vaccinated, 38,676 being successful. In the Decca division there were 5715, and in the Dinapore circle 4662; 3918 in the former, and 3471 in the latter, being successful. Altogether we have a grand total—vaccinated, 66,510; successful, 59,296. These operations were effected by 71 vaccinators. In Midnapore alone there were 24,127 persons vaccinated, and the very large proportion of 23,898 were successful, leaving only 239 cases which did not succeed.—*Lancet.*

Bayonet Wounds.—In reference to a paragraph in your impression of August 9th, commenting upon the fact of no mention being made of bayonet wounds in the late American actions, I beg leave to state that in the experience derived from presence on the field in upwards of fifty actions, I have only seen two bayonet wounds: one occurring in barrack, the result of a quarrel between two soldiers; the other, an accidental wound in the leg, received by the commanding officer of the regiment in which I was then attached, from the awkwardness of one of our own men. The impression upon my mind, therefore, is, that bayonet wounds are most rare on the field of battle.—*Brit. Jour.*

Original Communications.

DIALYSIS.

A REPORT ON A NEW MEANS OF CHEMICAL ANALYSIS.

By LOUIS ELSBERG, M.D.

LECTURER ON "THE APPLICATION OF REMEDIES," IN THE UNIVERSITY OF N.Y.

(1.) Graham on Liquid Diffusion applied to Analysis. *Royal Society Transactions*, London, 1861. Part I. *American Journal of Pharmacy*, 1861, p. 518

(2.) Redwood on Dialysis, *London Pharmaceutical Journal*, April, 1862.

(3.) Danbeny on Agricultural Chemistry, *Gardeners' Chronicle*, London, December 7, 14, 1861.

(4.) Procter on Dialysis. *American Journal of Pharmacy*, July, 1862.

(5.) Dialysis. Editorial Leader, *London Medical Times and Gazette*, August 2, 1862.

The art of chemical analysis is truly advancing with rapid strides. Accurate and untiring, enthusiastic yet laborious experimenters lead the van; and it requires the dedication of a Life's Mission promptly and thoroughly to follow. The medical practitioner, while his science makes it an imperative duty to familiarize himself with the stand-point which the great auxiliary and ally of his art has reached, finds it no easy task to keep himself *au courant* with even the methods of progress. Volumetrical and Microscopical analyses have but just been made available for the purposes of the physician; and "while yet fascinated with the beauties and subtleties of Spectral analysis, our attention is again claimed for another analytical discovery—less beautiful, it is true, and less subtle, but susceptible of much wider application, yielding results of greater practical value, and therefore possessing more immediate interest to us as medical men." (5.) The new method here alluded to—dialysis—we owe to the elaborate researches of Prof. Thomas Graham, the Master of the Mint, of London. It consists in effecting analysis by means of liquid diffusion. It requires only a most simple apparatus, dispenses almost entirely with chemical reagents, and is very easy to apply. Indeed, "it may fairly be described as a kind of royal road or short cut, enabling us to arrive at analytical results previously unattainable, or attainable only by processes far more complicated, and far more open to fallacy." (5.) I have thought it not unprofitable to transcribe from the sources indicated above—and especially from the last two, which themselves are reports based upon the preceding—a sketch of the nature of this new process, the mode of its practical application, and the valuable results that already have been and may yet be expected to be derived from it.

I have defined "dialysis" to be the method of effecting chemical analysis by means of liquid diffusion. Liquid diffusion has been defined as "the tendency which particles of matter in solution have to move from one part of a liquid menstruum to another, even in opposition to the force of gravity, under particular circumstances." (4.) It is well known that if a solution, of common salt for instance, be conveyed to the bottom of a jar of distilled water so carefully that the fluids be not mixed mechanically—either by means of a pipette or by placing the saline solution in a smaller jar—the dissolved salt will be found, after standing some time undisturbed, to have diffused itself into the distilled water. Now it has been ascertained (1.) that the same substance in aqueous solution always diffuses itself into the same superincumbent medium at the same rate within a certain time; while "different substances in solutions of equal strength diffuse unequally in equal times." (2.) Thus common salt diffuses into water at least twice as fast as Epsom salt, and the latter twice as fast as gum arabic. Of all the bodies hitherto tested (4.), hydrochloric acid is the most diffusive; assuming this body as unity, the time of equal diffusion for chloride of sodium is 2·33; for sugar 7; sulphate of magnesia, 7; albumen, 49; caramel, 98. Mr. Graham discovered that, as a general rule, crystallized bodies diffuse much more readily than amorphous substances; hence, he

classed highly diffusible substances together as *Crystalloids*, and gave to the feebly diffusible ones the name of *Colloids*, from *collin*, gelatine, the type of this class. Among the colloids are hydrated silicic acid, hydrated albumina, and other soluble metallic peroxydes isomorphous with the latter body, together with gelatine, albumen, starch, dextrin, and the gums, caramel, vegetable and animal extractive matters. (5.) Mr. Graham considers crystallizable bodies to be in a *statical* condition, while the colloids are in a *dynamical* state; that is to say, the latter have a greater susceptibility to the influence of external agents, and from this cause are adapted to the transforming influences of the processes of organic life, like albumen, gelatin, and fibrin of the animal body.

If, instead of a single substance, we use a mixed solution of two or more substances in our experiment with liquid diffusion, it is plain that what before was mere diffusion, now becomes a diffusive separation, for as the most diffusive body travels most rapidly, it will show itself first and most largely in the upper strata of superincumbent liquid. And separation of two or more substances will, of course, be the more complete the greater the difference between their respective diffusibilities. Furthermore, bodies of feeble diffusibility—colloids—will permit a highly diffusible substance—a crystalloid—in aqueous solution in contact with them to diffuse or pass through or into them, while they will refuse a passage, partially or wholly, to a body of the colloid class. Taking advantage of this fact, Mr. Graham found on trial that a very thin stratum of a gelatinous medium would prevent the diffusion of colloid bodies, and that by the use of such a septum or diaphragm, the process of separating the crystalloids from the colloids becomes greatly simplified. We can now amplify our definition of dialysis, which "is nothing more than the diffusive separation of crystalloid from colloid bodies through a septum of gelatinous matter, the septum allowing the passage of the one and not of the other." (4 and 5.)

The whole apparatus needed is a "dialyser" and a basin. The dialyser consists of a membranous septum stretched across a hoop or band of gutta percha six to ten inches in diameter and two inches high, and tied with a string, so as to form a vessel like a drum-head or tambourine. The basin is a dish or larger glass vessel of similar shape about six inches deep.

For use, the basin is three-fourths filled with distilled water, the smaller vessel is floated on it, and the liquid to be diffused poured into the latter, when the process proceeds without further attention.

By placing the liquid to be diffused at the top instead of at the bottom of the water, the process is much facilitated, especially where the diffusible body is abundant. The solution of the matter which passes the septum is called the diffusate. Parchment-paper, "made by simply passing ordinary white wrapping-paper quickly through a cool mixture of two parts of sulphuric acid and one of water, by weight, and then washing it thoroughly till the acid is removed" (4.), has been found to be the best septum, although paper starched with starch jelly, or gelatin, or coagulated albumen, and others, would answer. Redwood says (2.): "It may be well to observe that parchment paper or indeed any of the substances named above, can only be used as a septum in dialysing *aqueous* liquids. The septum is considered by Mr. Graham to owe its action to its condition, in the wetted state, as the hydrate of a colloidal substance, in which the water of hydration is held by a weak affinity, which the superior affinity exerted by a crystalloid can overcome. Hence there is dehydration taking place in one direction, and rehydration in the other direction, through the septum during its action. A septum suitable for dialysing alcoholic and ethereal solutions remains to be discovered. Some form of collodion may possibly answer the purpose."

Mr. Graham found that half a litre of urine, dialysed for twenty-four hours, gave its crystalloidal constituents to the external water. The latter, on evaporation, yielded a white saline mass, from which urea was extracted by alcohol in so pure a condition as to appear in crystalline tufts upon the evaporation of the alcohol.

As to the practical application and uses of dialysis, we find enumerated—

1st. It permits of the isolation of various chemical substances in a state of purity in which we were not previously aware of their being able to exist. For instance, chemists had hitherto never succeeded in obtaining a perfectly pure solution of silica. The solution obtained by treating silicate of soda with chlorohydric acid, was not pure, always containing a certain quantity of the acid and of chloride of sodium, which resisted all further attempts at separation. But by subjecting this solution to the process of dialysis, the acid and salt, being crystalloids, diffuse out, while the silica, being a colloid, remains behind dissolved in water, and perfectly pure. In like manner, dialysis enables us to obtain solutions of peroxide of iron, alumina, and several other bodies, perfectly free from the salts or other chemical agents hitherto indispensable to their solution. (5.)

2d. It affords a means of separating crystallizable and well defined bodies from amorphous matters, like extractive, gums, mucilages, the pectin-like substances, the tannins, oils, etc. For instance, if a vegetable extract containing an alkaloid or crystalline neutral bitter principle, be rubbed down with water to a uniform mixture and thrown on the dialyser, this active principle, together with all the soluble earthy matter, will be found in the diffusate, whilst the inert ingredients will be retained. Mr. John Attfield (*Pharm. Jour., March*, 1862, p. 447) has applied this apparatus in an investigation of the mineral constituents of plants, especially as exhibited in the saline efflorescences on the vegetable extracts, so familiar to all apothecaries. Mr. Attfield also suggests its use for purifying crude lemon juice.

Mr. Graham has separated the crystallized ingredients of urine. Baron Liebig has isolated creatin from extract of meat; and more recently he has demonstrated by its means the presence of *alloxan* in an animal secretion. (*Pharm. Jour. 528, April*, 1862.)

Mr. Buchner has shown (ibid. 572) that when a thick viscous mucilage of marshmallow root is put into the dialyser, over distilled water, after two days the whole of the asparagin of the root is in the first diffusate, and may be obtained in fine crystals by simple evaporation. (4.)

3d. It may become of the greatest use in "the separation of the more active crystallizable constituents of vegetable substances from inert colloidal matter, and *the production in this way of a new class of medicines*, containing the more active principles of plants, partially purified, and in the state of combination in which they exist in nature." (2.) Such preparations would occupy an intermediate place between tinctures, decoctions, and extracts, on the one hand, and the pure active principles which they often contain (such as alkaloids) on the other. The advantages of vegetable remedies in this form would be greater uniformity of strength, certainty of action, and convenience of administration. They would also keep better, and being void of all inert matter, they would be *purely* medicinal. The main difficulty in the way of their preparation is the very dilute condition of the solution, and the slowness of the operation, and consequent tendency to spoil and ferment; but it may prove, owing to ferments being colloidal matter, that the diffusates may not be liable to change to a degree that will embarrass the operation. Prof. Redwood is now engaged in applying dialysis to opium and aloes.* (4 and 5.)

4th. In medico-legal inquiries, it affords a most valuable means of separating arsenious and and the various poisonous metallic salts, as well as vegetable poisons, such as

* In the forthcoming work on *New Remedies* by Drs. Percy and Elsberg due prominence will be given to this new class of medicines, based on original investigations, by dialysis, of many, especially indigenous articles.

strychnia, morphia, and the other poisonous alkaloids, from the crude colloidal contents of the stomach and intestines and other organic solutions. For instance, let a portion of tissue suspected to contain arsenic be chopped into small pieces, soaked in pure water, and then thrown on the dialyser. At the end of twenty-four hours or so, the arsenic, even if its quantity be infinitesimally small, will have been diffused into the external water in a state fit for the immediate application of chemical tests. The poison is thus eliminated, free from all organic impurity, and without employing any agent at all liable to contain it—an advantage which any one will not fail to appreciate who is conversant with the usual process. Mr. Redwood has "already obtained these substances by dialysis from the stomach, the flesh, and the blood of animals that have been poisoned, distilled water alone being used for their extraction." (2.)

5th. It affords a partial explanation of certain points in physiology and in the knowledge of the modus operandi of medicines which have hitherto been involved in much obscurity. As to the physiology of digestion, the mucous membrane of the stomach and intestines may be compared to a dialytic septum between the blood on the one side, and the blood-making constituents of food on the other. Dilute liquids taken into the stomach, diffuse through (or as we generally say, are absorbed by) its mucous membrane. The plastic constituents of food, on the other hand, being colloids, "are retained in the stomach, while the act of digestion proceeds under the influence of crystalloids that are dialysed into that organ, and then pass on to undergo new changes connected with absorption, assimilation, and excretion." (2.) Also, "the action of medicines must be considerably influenced by the state in which they exist as crystalloids and colloids. Thus, iron in the state of chloride, sulphate, or other crystalloidal salt, would be diffused through the walls of the stomach; but not so if in the state of a colloid, such as basic chloride or basic nitrate, in which state it would pass into the intestines, exerting its action probably through the entire length of the alimentary canal." (2.) When we know more of the comparative diffusive power of different medicinal preparations than we do at present, we shall probably prescribe them with greater success. (5.)

6th. The transmission of sap through a plant, the separation of its various secretions from each other, and their maintenance in a state of isolation in appropriate receptacles, are phenomena also in part explained by the principle of dialysis. Although the sap is propelled upwards through the plant partly by capillary attraction, partly by atmospheric pressure, owing to the evaporation from the leaves and the partial vacuum thereby produced—it makes its way into the plant, in the first instance, by endosmosis through the spongioles of the roots. The peculiar juices of plants—starch, gum, oils, etc.—are generally colloids, and therefore have no tendency to pass through the walls of the cells in which they have been elaborated; the different acid and alkaline products, on the other hand, being crystalloids, permeate membrane freely, "but are only temporary constituents or steps in the series of changes which are intended to convert carbonic acid into sugar and starch, and they are consequently got rid of either by exosmosis or else by some chemical process by which they are converted into glucose or fruit sugar." (3.)

Lastly, the principle of dialysis has likewise important bearings on the nature of the ultimate molecules of matter, and on certain geological phenomena. It is believed that its further investigation will perhaps throw considerable light on molecular motion as a source of electricity, heat, and other imponderable influences, and lead to some knowledge of the essence or real condition of matter.

Cinchona in Trinidad.—A renewed attempt is being made to plant the cinchona in Trinidad. It has been planted at a height above the sea of 2800 feet, and in soil of the richest kind.—*Med. News.*

THE DISTINCTIONS

BETWEEN A VIRUS AND A POISON.

By W. H. THOMSON, M.D.,

MEDICAL REGISTRAR OF BELLEVUE HOSPITAL, AND STATE MEDICAL INSPECTOR.

[Read June 2d before the N. Y. County Medical Society, and published at its request.]

(*Continued from page* 132.)

Incubation, reproduction, and communicability, we have shown to be the essentials of viruses—facts that no more occur in true poisoning than in pleurisy or fractures. But there yet remains the great subject of the morbid process itself of these diseases. Between the periods of incubation and reproduction intervenes the period of development, when the peculiar symptoms constituting the particular virous attack make their appearance and run their course. True poisoning has this one period only, while viruses are always accompanied by the other two; but the pheuomena of this stage also are, in viruses, totally different from those that characterize the operation of poisons. In fact, they are hardly even analogous, much less similar, as they should be if they were similar agents. The action of poisons is rapid and tumultuous, analogous only to chemical reactions, and science has demonstrated that slow poison, that mysterious terror of the middle ages, and which even yet haunts the popular mind, is a pure myth, with no more real existence than the Immortal Elixirs or the Wandering Jew. Slow-poisoning can only be *repeated* poisoning. In no case, not even in the subtle animal poisons that give rise to erysipelas, pyæmia, and similar states, does there occur an elaborate and necessary succession of symptoms, which can never be reversed, least of all a succession whose steps are so slow as to require three days, or seven, or nine, or fourteen, ere a certain symptom, peculiar to the poison, will follow a previous, similarly peculiar, symptom. But regular and definite changes, preserving their order during the access, height, and decline of the process, and measured by a certain number of hours, days, or weeks, according to the particular disease (just as the similar variations in the period of incubation), are the characters of the period of virous development. We thus are often able to predict the issue in time as well as manner, by observing a few of the initial steps; but in poisoning our only real principles of prognosis are the *amount* of the poison actually in the system, or in danger of getting in, and, very secondarily, the individual susceptibility. In every epidemic of virous diseases, the vast majority of persons really exposed to them, escape altogether. How inexplicable would this be if they had all received equal doses of a poison; for how many will escape of a dinner party who have mistaken aconite root for horse-radish? Viruses, with one or two exceptions, obstinately refuse to afflict more than one species, or than certain ages of the same species; but if a virus is one of the poisons, why cannot our experimenter give hooping-cough to his cat as easily as he can give it fits with strychnia, or the opposite with woorara?

But there is a class of poisons, well termed the septic animal poisons, which have certain striking and peculiar characters, at first sight somewhat resembling those of viruses, and without doubt it is owing to these that viruses have been confounded with poisons. These supposed resemblances, therefore, merit a careful consideration, for we think a true comparison will show them to be entirely distinct both in nature and action. The venom of serpents is probably the best type of these poisons, as the lymph of variola is of viruses. We are first struck with the wonderfully small quantity of the poison necessary to destroy life. A minute drop, injected in the cellular tissue, almost immediately overwhelms the nervous system, as shown in the sudden paralysis of respiration, and after a few convulsive efforts, all vitality ceases, to be followed with extraordinary rapidity by the chemical phenomena of decomposition. But there is nothing peculiar in this; for all other poisons, including mineral poisons like arsenic, may destroy wholly

by their thus overpowering the nervous system, and these identical symptoms accompany equally the most different poisons, when the *dose* actually operating is great enough. To obtain the peculiar symptoms of the particular poison, the dose must be smaller, so as to have time to derange specifically the other functions and tissues. The drop of venom, therefore, though minute, was nevertheless an overwhelming dose, and did not manifest the real specific symptoms of the poison, which are very different, and which are common to the wide class of septic poisons, so as to prove them to be analogous agents. Those symptoms are a violent inflammation, beginning at the wounds and rapidly spreading in the cellular tissue, accompanied with great swelling, sloughing and formation of pus, which, if the patient lives long enough or ultimately recovers, take the form of multiple abscesses. The formation of an abscess is an indication of a resistant vitality, circumscribing the original diffusive action of the poison. Fever, assuming an adynamic type in proportion to the extent of the poisonous action, is another particular symptom of septic poisoning. But these same symptoms may arise from inoculation of a very small quantity of dead animal matter, as in dissection wounds, which seems owing to a peculiar volatile poison, generated only in incipient decomposition. Another step brings us to the same symptoms set up in wounded surfaces originally healthy, but which have been exposed in an atmosphere charged with decaying organic matter; and lastly, we meet with the same action, set up without a wound to begin with, and which we term idiopathic erysipelas, but which is most certainly in many cases the product of a decomposition in a system made erysipelatous by putrid air, food, or drink. Now the production of this class of symptoms, from a minute quantity of an animal secretion, from an equally minute quantity of decomposing animal matter, but especially from their arising after exposure to animal effluvia, has been considered sufficient to prove that small-pox, scarlatina, typhus and typhoid fevers, cholera, and the whole class of viruses, are like agents and of like origin, and the occasional production of vast quantities of pus and multiple abscesses from the minute original poison has been accepted as identical with the reproduction of a virus. The great influence which this decomposition theory of viruses has exerted on medical opinion and practice, and the amount of controversial wind which has been spent by advocates against the term Contagion—as if it was the only distinction between a septic poison and a virus, and therefore to be roundly denied—can hardly be calculated. But let us apply rigidly the rules of a virus to a septic poison: First, when a patient is bitten by a fiery serpent, will he begin to find it out only nine days afterwards? Will he then become worse than a den of serpents, and capable of poisoning others from every pore of his body, in the same fashion that the serpent first poisoned him? And finally, when he has recovered, will he be perfectly willing to finger the next viper he falls in with, because he never can be affected by a serpent's bite again? It is perfectly absurd to expect such results after a septic, as well as after any other kind of poisoning; but nevertheless they are the common parts of viruses, and are consistent with the nature of viruses. Finally, it requires but a superficial examination to perceive that the spread of septic poisonous action, from the original starting-point, has no real analogy with the phenomenon of reproduction in Viruses. The spread of erysipelas is like the spread of a fire, not like a *growth*, and the analogy is carried out even in its slightest and most superficial forms, termed sometimes wandering erysipelas, which, like fire in short grass, spreads in one direction, and dies out in the other.

The fact that patients with the same virous disease present great variations in the length of their illness is no real objection to the statement that the attack is composed of definite and limited stages, for these variations are entirely owing to functional complications, as inflammations, etc., which may continue after the virous process itself is completed. But in typical cases the action of a virus presents a series of increase and decline, holding true of its leading characters as of the disease as a whole. A virus eruption, for example, we see commence with minute points, which in definite times grow, maturate, and then dry up like a crop of berries. The leaves and twigs grow and decline, as the whole grows and declines. Therefore instead of the process of Development—the morbid action itself, in Viruses, being analogous to chemical action, as the action of a Poison is—it is analogous only to a process of *Growth*, and then ends with the last step of growth, namely, *reproduction*.

But viruses have a great many other characters which separate them from poisons. Thus we said Quantity is a necessary element in poisons—it is hardly an element at all in viruses; for who can hit upon the poisonous, and less than poisonous dose of scarlatina, for instance; or if, instead of inoculating with variola lymph, enough only to moisten the tip of the lancet, we injected an ounce, would the patient have small-pox in an hour, or a day? Again, our experimenter ought, in the generality of cases, to produce with like, or proportioned doses of poisons, like effects in all, in old and young, in men and in animals, and at all seasons of the year. But viruses, on the contrary, are exceedingly capricious, killing some and simply touching others, who yet seem alike in exposure to the virus and in every other respect, as two children of the same parents, one dying with scarlatina maligna, the other recovering with scarlatina simplex. Some viruses are killed by frost, some never leave warm climates, against others we use heat as a "disinfectant." Frequently for years a virus will not affect some persons, and then suddenly attack them—can this be said of any poison? Thousands they will attack at no time, nor after the most diligent coaxing; why not, no one knows. Hertwig had a dog bitten by nine mad dogs without other result than sores.

(To be Continued.)

Reports of Hospitals.

NURSERY AND CHILD'S HOSPITAL.

THE LIVER IN THE SUMMER COMPLAINT OF CHILDREN.

BY J. LEWIS SMITH, M.D., CURATOR.

There has existed a vague opinion in the profession that the liver is somehow in fault in the summer complaint of children. This opinion is, no doubt, fast losing ground, but it is still held by many, and it exercises a marked influence on the treatment of the disease. The following observations have been made in and since the year 1859, in order to determine to what extent this organ is affected. The date gives the time of the autopsy.

Case 1.—June 21, 1859, æt. 6 months, previously somewhat emaciated but otherwise well, had the summer complaint three days, the liver was rather small not extending below the margin of the ribs, it contained fewer oil globules than usual, most of the hepatic cells contained none. *Case* 2.—June 8, 1859, æt. 5 months, six days sick, the liver appeared healthy, and of about the usual size. *Case* 3.—July 16, 1859, æt. 9 weeks, an emaciated almshouse child, sick three weeks, liver small and almost destitute of oil globules, nine-tenths of the hepatic cells contained none. *Case* 4.—June 8, 1859, æt. 3 months, sick twenty days, liver of natural size and color, and containing about the usual amount of oil globules, from one to six or eight globules in most of the hepatic cells. *Case* 5.—June 10, 1859, æt. 4 months, sick five days; the liver presented the ordinary appearance, it contained rather less fatty matter than usual, few of the hepatic cells contained more than five or six oil globules. *Case* 6.—July 14, 1859, æt. 7 months, sick at least three weeks; liver of a yellower hue than usual but not enlarged, the oil globules considerably exceeded the normal amount. *Case* 7.—Aug.

8, 1859, æt. 7 months, sick one month; liver of healthy appearance, weighing 4½ oz. *Case* 8.—Aug. 15, 1859, æt. 19 months; had looseness of the bowels several weeks, and previously was emaciated; the liver extended half an inch below the margin of the ribs; it weighed 9 oz.; most of the hepatic cells contained few oil globules, but some of the cells contained numerous globules of small size. *Case* 9.—Aug. 15, 1859, æt. 15 months; had more or less looseness of bowels for two months before death, and previously to this was emaciated; weight of liver 7½ oz.; its appearance natural, nothing unusual was discovered in this organ under the microscope. *Case* 10.—Aug. 17, 1859, æt. 15 months; had looseness of the bowels since the commencement of warm weather; liver of healthy appearance; its weight 6 oz. *Case* 11.—Aug. 15, 1859, æt. 14 months; had the summer complaint at least three weeks; weight of liver 9 oz.; its appearance natural, both to the naked eye and under the microscope. *Case* 12.—Aug. 22, 1859; age not given nor duration of sickness; weight of liver 8 oz., of healthy appearance; it contained the ordinary quantity of oily matter. *Case* 13.—Sept. 4, 1859, æt. 2 months, sick one week; weight of liver 3½ oz., its appearance natural; there were few hepatic cells which contained more than four oil globules, and many contained none; there was but little free oily matter. *Case* 14.—Sept. 5, 1859, æt. 16 months; much emaciated; liver small, weighing 6 oz., and containing very little oily matter. *Case* 15.—Aug. 27, 1859, æt. 9 months; liver for the most part of natural color, but yellow in places; weight 8 oz.; it was found by the microscope to contain no more than the usual amount of fatty matter. *Case* 16.—Aug. 31, 1859, æt. 5 months; admitted Aug. 5 with looseness of bowels; weight of liver 6½ oz., its surface mottled, of a fatty appearance in places; this organ generally, as shown by the microscope, was not fatty. *Case* 17.—September 4, 1859, æt. 7 months; sick less than a week; liver weighed 6 oz. and contained less oily matter than usual. *Case* 18.—September 15, 1859, æt. 23 months; had the bowel complaint through the warm weather, though occasionally it was checked; had tuberculosis; liver of nearly natural color, weighing 15 oz., and quite fatty. *Case* 19.—July 3, 1860, æt. 13 months; had the summer complaint nearly a month; liver of yellow hue, weighing 6 oz.; the hepatic cells contained more than the ordinary quantity of fat. *Case* 20.—July 3, 1860, æt. 4 weeks; liver extended two inches below the margin of the ribs; weight 5 oz.; contained few oil globules. *Case* 21.—July 21, 1860; sick two days; liver presented a mottled appearance, as if fatty in places; weight 6¾ oz.; the hepatic cells moderately fatty. *Case* 22.—Aug. 4, 1860; sick two weeks; liver weighed 9 oz., mottled yellow; very fatty. *Case* 23.—Aug. 7, 1860, æt. 2 months; sick 10 days; anterior border of the liver even with the margin of the ribs; weight 3½ oz.; usual color; this organ contained very few oil globules, either free, or in the hepatic cells. *Case* 24.—Aug. 8, 1860, æt. 2 years; had also pertussis; liver mottled with yellowish, evidently fatty spots or patches. *Case* 25, Aug. 17, 1860; the liver extended half an inch below the lower margin of the ribs, of usual color; weight 5 oz. *Case* 26.—Aug. 30, 1860, æt. 5 months; sick one week; the liver extended half an inch below the margin of the ribs; its hue rather yellow, weight 9 oz.; it contained numerous oil globules, both free and in the hepatic cells. *Case* 27, July 18, 1861; the liver did not appear congested; it contained generally less than the ordinary amount of fat; but in places it was of a yellower hue than in others. *Case* 28.—Aug. 1, 1861, æt. 2 months; bowels loose about a week; liver small, and very dark; the microscope showed it to be almost destitute of oily matter. *Case* 29.—Aug. 12, 1861, æt. 16 months; sick less than a day; the liver appeared healthy, and it contained the normal amount of fat. *Case* 30.—Aug. 12, 1861, æt. 3½ months; anterior margin of the liver even with the ribs, weight 5½ oz. *Case* 31.—Aug. 19, 1861, æt. 15 months; thought to have pertussis also; weight of liver 9½; contained the normal amount of fat. *Case* 32.—Aug. 21, 1861; a few months old; liver of the common appearance, weight 3½ oz. *Case* 33.—Oct. 9, 1861, æt. 20 months; sick more or less all summer; liver rather yellow; but more so in some places than in others, weight 9¼ oz.; some hepatic cells were found free from fat; but others were loaded with it. *Case* 34, July 7, 1862, æt. 4 months; looseness of bowels for several weeks; weight of liver 5 oz, yellow and very fatty. *Case* 35.—July 28, 1862, æt. 7 months; was losing flesh for a considerable period; but there was no serious looseness of the bowels more than 24 hours; liver healthy, weight 6 oz. *Case* 36.—Aug. 27, 1862, æt. 7 months; had the bowel complaint several weeks; liver examined by the microscope, appeared healthy; weight 6¼ oz. *Case* 37.—Aug. 29, 1862, æt. 10 months; sick about one week; the liver weighed about 6¾ oz.; examined under the microscope it was found to contain more than the normal amount of fat; the hepatic cells were generally nearly filled with it.

It will be seen, that there was no evidence from the post-mortem appearance of the liver in these cases of any congestion, or torpidity, or hyper-activity, or perverted secretion. The size of the liver was sometimes very different in patients of about the same age, but probably there was no greater difference than usually obtains among glandular organs within the limits of health. The following table gives the weight of the liver in twenty-two cases, in which the weight of this organ and the age of the patient are recorded.

Age.	Weight.	Age.	Weight.
4 weeks	5 oz.	9 months	8 oz.
2 months	3 and a half oz.	10 "	6 and 3 quarter oz.
2 "	3 and a half oz.	13 "	6 oz.
3½ "	5 and a half oz.	14 "	9 oz.
4 "	5 oz.	15 "	6 oz.
5 "	6 and a half oz.	15 "	7 and a half oz.
5 "	9 oz.	15 "	9 and a half oz.
7 "	4 and a half oz.	16 "	6 oz.
7 "	6 oz.	19 "	4 and a half oz.
7 "	6 and a qu. oz.	20 "	9 and a quarter oz.
7 "	6 oz.	'23 "	15 oz.

I do not have access to any tables giving the weight of the healthy liver at different ages, but in none of the above cases does the size, or the weight, seem to me to be above the healthy standard, unless in Case xviii, in which this organ was quite fatty. But in this case the size of the liver was probably due to the tubercular disease.

In most of the cases the liver was examined microscopically, and the only fact worthy of note observed, was the variable amount of fatty matter. Sometimes it was in excess, sometimes in moderate quantity, or rather deficient, and sometimes, apparently, in greater amount in one portion of the organ than in others.

In conclusion, these observations go to show that the liver plays an insignificant part in the pathology of the summer complaint. The green stools, which have long been referred to the biliary secretion, must be mainly due to causes operating in the intestines, for I have repeatedly noticed that the green color does not appear till we reach the lower part of the jejunum, or upper part of the ileum. Examined under the microscope the green matter is found to be in little fragments or masses, as if produced in the crypts of the intestines.

Medical Commission of Massachusetts.—The opinion of the members of this Board having been frequently asked as to the value and importance of lint in the treatment of surgical cases, they beg leave to say that they are satisfied that there are other means that in most cases would be more useful, and in all equally so. They refer to old linen and cotton compresses, wet or dry, and soft sponges, which would, in almost if not in every instance, be found to answer all purposes likely to be accomplished by the use of lint. George Hayward, *Chairman*, John Ware, S. D. Townsend, J. Mason Warren, S. Cabot, Jr., R. M. Hodges. —*Boston Jour.*

Progress of Medical Science.

PREPARED BY DR. P. F. C. DESLANDES.

INTRA-THORACIC HYDATIC CYST, SPONTANEOUS AND PERSISTENT EVACUATION THROUGH THE BRONCHI OF A CONSIDERABLE NUMBER OF HYDATIC VESICLES; DEATH. BY PROF. HENRI ROGER.

(*Continued from page* 147.)

II.—Mdlle. R., to whom I was called on the 6th of July of this year, by my *confrère*, Dr. Lyon, is fifteen years old, has not yet menstruated, looks delicate, is very thin, and has had, for the last two months, a brown, pale, yellowish, and cachectic complexion. It was in the month of April, 1860, that a little dry cough, which had then existed for some time, attracted the attention of the family. This cough was frequent, painful, and came on by fits like that of hooping-cough. It was accompanied, at intervals, by a peculiar expectoration, "like the skins of large grapes." Its nature was discovered at a later period of the disease only. At that time there was fever, dyspnœa, emaciation, and one of our *confrères*, a most experienced practitioner, called in consultation, diagnosticated a chronic pleurisy, with probable tubercles. The physical signs and general symptoms certainly justified this opinion. He recommended a season at Bagnères-de-Luchon, and during the winter a sojourn in a warm climate.

At Luchon, the young girl, in a fit of oppression and cough, with fever, ejected by the mouth a large quantity of matter, which Dr. Lambton recognised positively for hydatids, estimating the number of them at 30 or 40. After this evacuation through the bronchi, there was a sensible amelioration in the symptoms. Mdlle. R. spent the winter at Amélie-les-bains; the fever had disappeared, the complexion was better, the strength was greater, the general health was very satisfactorily restored.

But in the month of May, 1861, the reappearance of the symptoms which had shown themselves at Luchon brought the young patient back to Paris. The cachectic phenomena, the fever, the slight dry cough had reappeared, and hydatids showed themselves often in the sputa (once or twice a week) and were often mixed with mucuso-purulent matter.

Such is the information given me by Dr. Lyon, at my first visit, and which left no doubt as to the nature of the disease with which Mdlle R. was affected. The preceding day's hydatids had again been expectorated, and the father of the young girl estimated at three hundred, at least, the number of those evacuated since the beginning: the facies presents a markedly changed expression; the complexion is of a slightly yellowish paleness, without there being, however, any trace of icterus, either on the scleroticæ or in the urine. This secretion never presented either bilious coloration or reddish brick-dust deposit. The young girl, who cannot lie in bed, except with her head and trunk elevated, and inclined on the right side, the decubitus on the healthy side being impossible, spends the greater part of the time she is allowed to sit up in an arm-chair, the trunk carried forwards as an asthmatic. The respiration, which is loud, rather rapid, with slight dilatation of the alæ nasi, is accomplished without pain. The cough is very frequent, sometimes dry, sometimes with expectoration of muco-pus, mixed with blood, and these last days more remains of hydatids. I examined some vesicles, as large as a grape, altered, and which, having lost their transparency, were of a greyish white. I could not discover with the microscope, in the liquid collected at the same time, any hooks (crochets) of echinococcus.

On inspection, the chest is evidently prominent in the lower portion of the right side, as in cases of pleurisy; palpation is painful in the submammary and hepatic regions, without the liver appearing, on percussion, increased in volume, and without its projecting beyond the false ribs, by more than one finger's breadth. There is also some pain in the right shoulder. On percussion of the thorax, we find a marked dulness in the two lower thirds of the right side. This dulness, which exists on the same level anteriorly and posteriorly, mingles below with the hepatic dulness. I vainly try by a sudden pressure on the intercostal spaces to produce the hydatic fremitus. This exists only when the hydatids are living. On this sound side the vesicular murmur is absent; there is a complete silence, at the summit only, and on a level with the large bronchi, the murmur is rough and even bronchial. Neither deep inspirations nor the cough reveal any kind of râles. On the left side, the sounds are normal, and the vesicular murmur exaggerated. The pulse is rapid, between 110 and 120, the skin is dry, and rather cold than warm; we observe at intervals chills and exacerbations; the fever is already hectic. The appetite has decreased, and within a few days there has been some diarrhœa. The stools, however, contain no hydatids.

Under the influence of inhalations of iodine or camphor (iodine vapors were too exciting and painful), we observed a momentary amelioration. But this did not continue, and fourteen days after, when I saw Mdlle. R. again, I found her nearly in the same condition as regards the functional derangement or the physical signs. The expectoration of vesicular worms had continued to be abundant, and the sputa were mixed with pus and blood. The day before (July the 19th), during a walk, Mdlle. R. was seized with vomiting, and vomited a few spoonfuls of pus with five or six hydatids, and this morning she has thrown up twenty.

One week later, the 27th, Dr. Lyon sent again for me in haste. The patient had had two fits of suffocation which had ended in an emesis. She had ejected more than half a glassful of sanious pus. The body, far from having decreased, seemed to have increased, and in front of the chest (the only region we could explore, and that yet very incompletely), the dulness existed almost as high as the clavicle. The respiration was loud and anxious, with marked dilatation of the alæ nasi. She was depressed, half comatose, and sunk in her bed; she was not even able to get up for the examination. The pulse was thread-like, the skin cadaverous and cyanosed, covered with a viscid perspiration, and the extremities were getting cold. We thought of *paracentesis thoracis* by means of an incision, but the difficulty, or rather the almost impossibility of operating stopped us, the child refusing even to change her position; but above all we were kept back by the imminence of a near death which we would certainly have hastened. The poor child died hardly an hour after our departure.

(*To be Continued.*)

Reports of Societies.

MEDICAL AND SURGICAL SOCIETY.

DR. HALSTED IN THE CHAIR.

STATED MEETING, Feb. 15, 1862.

RESPIRATORY DISEASES COMPLICATING CONFINEMENT.

DR. ELLIOT reported three cases of respiratory disease complicating confinement. 1. A primipara with laryngitis, which occurred before delivery. Tenderness over femoral vein. No evidence of phlebitis found after death.

2d. A primipara in whom pleurisy occurred before delivery. Capillary bronchitis and effusion. Death from œdema of lung. Urine drawn, but lost. Used nitrous oxide gas and inhalation of steam. On post-mortem examination, fatty degeneration of liver and kidney was found. Nothing about the patient to make one suspect uræmia.

3d. Pleurisy preceding labor; after confinement pneumonia, followed by bronchitis; finally, delirium, which was excessive. Died this A.M. (Since these minutes were

taken the autopsy has taken place, and examination of the kidney by a number of gentlemen exhibited a considerable degree of granular and fatty degeneration. The liver was also the seat of fatty degeneration.)

ULCER TREATED BY ELECTRICITY.

Dr Metcalfe said he had met in a gentleman's office a patient with a slight ulcer in the centre of the forehead, upon which all antisyphilitic remedies had been employed without success. Electricity was used, and the ulcer speedily healed. This remedy was found out accidentally by one of the poles falling upon a sore on the foot of a gentleman.

MANIA FOLLOWING MASTURBATION.

Dr. Metcalfe also related the history of a case of mania in a young lady who was given to masturbation. She acknowledged that she was in the habit of committing the act two or three times a night. There was considerable irritability and redness of the clitoris, which was successfully removed by the use of black wash. It afterwards reappeared. Dr. M. thinks these cases are more frequent than the profession are disposed to believe. He suspects the patients from the peculiar neuralgic pains spoken of by them. In the case above there was headache.

CASES OF REFRACTURE, WOUND OF ABDOMEN, ETC.

Dr. Markoe related the history of a case of refracture of the thigh, and treatment by the new apparatus of Dr. Buck. A boy, æt. six years, received a transverse fracture of the thigh, about six weeks previous to coming under the care of Dr. Markoe. It was put up by a country surgeon, in side splints and starch bandage. At the end of five weeks the apparatus was removed, and the bone was found to be united, with considerable deformity and one and a half inch shortening. He was brought to the city, and Dr. Markoe suggested refracture. The operation was done six weeks after the injury, and the limb was put up in the long splint, which reduced the shortening to half an inch; the perineum strap, however, produced so much excoriation that the long splint was removed and the new apparatus substituted. Instead of using the perineum strap Dr. Markoe had recourse to a broad plaster of canton flannel adhesive strap, fitted to the lower part of the back and covering the buttocks: to this were attached three counter-extending straps which were fastened to the head of the bed. This was at first intended as a temporary expedient, but it answered the purpose so well that it still remains on. The shortening has been reduced by this apparatus to one quarter of an inch.

Dr. Buck alluded to two cases of refracture treated by this method, where the shortening had been reduced from two and a half inches to half an inch. These results are better than with the old apparatus. One of the advantages of this method is that the counter-extension may be shared by the weight of the body, the limb being placed in an inclined position. Dr. Buck also alluded to the uses of this mode of extension in cases of rigidity and contraction resulting from disease of joints, abscess, the cicatrices of lacerated wounds and burns.

Dr. Markoe also related the incidents of a case illustrating the endurance of the human frame after apparently severe injury. He was called nineteen days ago to see a man who had been stabbed. He found the patient to be a man seventy years of age, a master carpenter, of a healthy, vigorous constitution, and of excellent habits, ordinarily. On the evening when he was injured he had been drinking somewhat largely of beer, and getting into a quarrel with another man had received two stabs, one in the arm and the other in the abdomen. He felt no special inconvenience from these wounds, and walked several blocks, when he stopped at an apothecary's store, and had the wound of the arm dressed. He then walked several blocks further to his home and went to bed. After some time he took more particular notice of the abdominal wound, and becoming alarmed sent for Dr. Markoe, who found a protrusion of quite a large knuckle of intestine, the surface of which was dried and roughened from rubbing against the clothing of the patient during his walk. With some difficulty Dr. Markoe succeeded in reducing the protrusion through the wound, which was very small. He put a stick through the deep muscles and closed the wound. The man has not had an unfavorable symptom to the present time. The pulse soon rose above 60, and he is now going about with the wound almost perfectly healed. Dr. Markoe also stated that he had now under his supervision a man forty-five years old, who first applied to him about two months ago, having been until a short time before in apparently good health. One morning he was seized with a pain just below the umbilicus, extending downwards towards the bladder, which he attributed to colic, and which was relieved after the action of a cathartic. In five days this was repeated, and every five days thereafter he had a similar attack up to the time when Dr. Markoe saw him. He then was suffering from this pain, and was somewhat enfeebled. He was put under a mild treatment for colic, and after a few days he showed to the Doctor some of his urine, which he said had now for the first time become milky in its appearance, and deposited a thickish substance on standing. On examination this deposit proved to be true pus. This was six weeks ago, the man has to *appearance* recovered, but the discharge of pus with the urine still continues in the quantity of about four ounces per day. There has been no appreciable inflammation or disturbance either urethral, vesical, or renal, except at one time when he had some pain in the neighborhood of the right kidney, at which time the pus disappeared from the urine, and reappeared simultaneously with the alleviation of the pain. No disease of the mucous membrane anywhere could be ascertained. Fully three-quarters of the entire quantity of pus now passed daily, is passed early in the morning. Dr. Markoe supposed there must have been an abscess exterior to the bladder which had opened into the bladder or some one of the urinary passages, but thought it very singular that the regular discharge of pus should have continued undiminished for so long a time.

Dr. Parker thought an abscess must have existed, opening into the bladder near its neck or into the urethra.

Dr. Post reminded the society that he had reported some months ago the case of a woman who had an abscess in one groin which subsided upon the discharge of pus with the urine.

Dr. Bumstead reported the case of a child seven years of age who had inserted a pea into his ear. Another child had pushed it with a stick down upon the drum. Several physicians had attempted to remove it, but had not succeeded. Dr. Bumstead tried to remove it with forceps, and afterwards by syringing, but failing in these he at length succeeded by using Schuft's spoon for the outspooning of cataract. The pea separated in halves just as it was brought to the meatus.

Dr. Parker stated that on the second of October he had been called to see a gentleman in the country, a farmer, thirty-seven years of age. Four years ago this man had pneumonia of the left lung, presenting no unusual features, from which he recovered. Soon after this he observed a small tumor on the left side of the chest, just under the clavicle and near its outer third. It was at this time of about the size of a butternut, distinct and pulsating, but unaccompanied with pain, and producing no inconvenience except a little tightness when he wore a tightly fitting coat. He paid but little attention to it, and about the middle of August applied to a physician to examine him as to his fitness for military duty, when the tumor was declared to be of a serious nature, being aneurismal; it had now attained the size of a teacup. Two weeks before Dr. Parker saw him, while carrying some bags of corn to a waggon, he felt something give way, and immediately after the tumor began to increase and become painful. Dr. Parker when called found the difference in measurement of the right and left sides to be eight and

a half inches. On the second of October he tied the left subclavian artery in the third division. Dr. Parker thought it singular that the tumor should have existed so long without increasing in size until very recently. The patient was doing well.

Dr. Post referred to a case of popliteal aneurism in the New York Hospital, where the man refused to be operated upon, and the tumor remained about the same size for three or four years.

DIPHTHERIA.

Dr. McCready had under treatment a little girl four years old, whom he found on Wednesday pale and anæmic, with hot skin, a pulse of 160, constipated bowels, etc.; he gave a cathartic, and at his visit the following day his attention was called by the mother to the child's throat. He found the right tonsil very much enlarged and partially covered with a milky looking exudation; on Friday a full diphtheritic membrane covered the entire tonsil; and today, Saturday, a piece of tough membrane was discharged without apparently diminishing the covering of the tonsil. The general symptoms are improving, and the improvement seemed to begin as the membrane appeared.

The Society then adjourned.

American Medical Times.

SATURDAY, SEPTEMBER 20, 1862.

HEALTH IN OUR NEW NAVY.

"The first and most important question to the seaman is his health. The death-rates for the fleet are in general satisfactory; but in some exceptional cases they are not, ranging in fact, as high as 60 per 1000 per annum. On home stations the rate is 10, and the average on the whole is 16. We have inquired whether some improvement might not be made in the food of the seamen, and also in the ventilation of the berths. We have had a Committee sitting some time, and the result is that the Admiralty have resolved to make every possible effort to improve the ventilation of the ships. Everybody who has been on board ship in the lower deck, will know that the atmosphere is sufficiently bad to provoke almost any kind of disease, especially phthisis and fevers, as has been shown by the returns from the Mediterranean fleet."—Lord Clarence Paget.

Among the departments of the public service which this present war is revolutionizing, is the navy. At its commencement the United States had but 88 vessels of war, of all kinds; it has now upwards of 300 vessels, with a large prospective increase. A little more than a year ago we had about 8,000 soldiers and marines, but this number has been increased until we now have upwards of 23,000 seamen in the naval service. Hitherto the navy has attracted but a small share of the attention of the Government or the people, whether we regard the construction of vessels, or the character and condition of seamen. This is due to the fact that our naval service has been of little public importance during the long interval of peace just passed. The unexpected demand which is now made upon the navy has awakened our Government and the people at large to its importance as a power in time of war. With unexampled rapidity a naval force has been organized, ships constructed, their armament manufactured, and to-day we may fairly challenge the nations of the world to present a more formidable navy.

In the construction of our new vessels, every possible care has been taken to render them effective in service. Naval science has been tasked to the utmost to give the best model for strength, capacity, fleetness, and invulnerability. And science has not been appealed to in vain. She has practically revolutionized naval warfare during the last two years by the improvements introduced into the construction and armament of vessels of war. So entirely different are the models of some of our gunboats from any heretofore known, that at first sight even the best naval officer cannot recognise in them vessels of war. The first appearance of the Monitor completely deceived the rebel Commodore; and from the novelty of its construction, he was led to regard as a mere plaything the most powerful battery ever set afloat.

But while we have opened a new era in the navies of the world, have we done aught to render vessels of war more habitable to seamen? In all the discussions of the architects of new vessels, we hear little or nothing said of providing for the health and comfort of those who are to occupy them. We have not hitherto given a thought to this most important subject, and it is not strange that it should now be in part or wholly overlooked. It is a serious matter, however, and demands the earnest attention of Government; for on the preservation of the health and efficiency of the 20,000 to 30,000 seamen in its service depends the effectiveness of its war vessels.

The most important changes which have been made in the construction of our new naval vessels, bearing upon the health of the inmates, are: 1, the introduction of steam; 2, iron plating; and 3, rendering them sub-marine. With equal ventilation a steamship is far more unhealthy than a sailing vessel, for the simple reason that the internal heat on the former tends to give efficacy to those sources of impurity and disease which are always incident to large ships. It is also asserted by naval surgeons that the accumulation of offensive rubbish under the machinery adds to the impurity of the close hot air in the between-decks. The increased mortality in the English navy, from yellow fever, during the last fifteen or twenty years, has been found on the steamships. The same is true of our own mercantile marine; and there are some indications that this fact will be further demonstrated by our naval steamships engaged in the blockade.

Of the probable influence of iron-clad ships on the health of seamen a London contemporary thus speaks:—

"When it is considered that hitherto armor-clad ships have been so built that their walls will, it may reasonably be inferred, rapidly accumulate and store up heat; and that the circulation of air in the between-decks, unless artificially provided for, will be diminished to the least amount, in consequence of the smaller number and less size of the port-holes, and the rigid exclusion, for the sake of strengthening the walls, of all apertures not absolutely required between the exterior and interior of the vessels, it is manifest that, unless the evils likely to arise from these sources are specially provided against, these ships may in the end become veritable pest-houses. That this foreboding is no mere sanitarian exaggeration, and that we are justified in fearing, there being no evidence to the contrary, that the health condition of armor-clad ships has not received that attention which the importance of the subject demanded and still demands, may be gathered from the results of the trial trips of the vessels of this class already built. They have proved to be very uneasy in a sea-way, and as a consequence it may be surmised that it has been necessary to keep the ports closed to a greater

extent than in wooden ships of war—and closure of the ports, it is not to be forgotten, cuts off almost the entire ventilation of the between-decks. The heat of the between-decks, so far as may be judged from the experiments recorded in the naval news of the day, would seem to range higher than in wooden steam-vessels of war—the sickliest ships in the service, in consequence of their heightened temperature. The sailors complain of the extreme 'wetness' of the armor-clad ships; and it is highly significant of the state of the between-decks, that a little while ago a report was current in naval circles that deck-houses would probably be needed for the crews. Finally, experience has taught that the bilges of these ships require to be dealt with after a new fashion. We learn from the *Times* of the 10th ultimo, that some seventy tons of bricks and mortar have been built into the bottom of the Warrior to prevent the lodgment and consequent stagnation of the bilge-water." If to these qualities tending to produce and aggravate disease on board of our newly constructed naval vessels, we add their submergence, on the plan of the new Monitors, except the decks, which are imperforate, it cannot be doubted that we have multiplied their conditions of unhealthiness indefinitely. Of their special means of ventilation we are not informed, but that it must be defective is evident from the foregoing remarks. It is fearful to contemplate what must be the mortality of their crews if located in the vicinity of such a malignant disease as yellow fever. They would become the very hot-beds of pestilence.

It is of little consequence how completely a gunboat is iron-plated if its construction is such that mariners cannot live on board. The Monitor came near smothering its crew at sea by its bad ventilation, and thus proved itself worthless as a sea-going vessel. It is to be feared that this is but an illustration of the defects which time and circumstances will demonstrate to exist in our new navy, unless more attention is given to the sanitary condition of individual vessels. We commend to the Secretary of the Navy and his medical adviser the following truthful statements of an experienced naval officer:—

"It is now admitted, on all hands, that the strength and virtual efficiency of an armed force, whether afloat or on shore, is to be measured, not by the mere number of the names on the ship or regimental roll, however complete may be all the material equipments of the force, but really and truly by the actual number of hearty, vigorous men, who are, from day to day, and from month to month, continuously available for fatigue duties of all sorts. Every man put on the doctor's list is so much power withdrawn from the full effectiveness of the living machine Nay, it is more than this; for each such loss becomes the occasion of extra duty being cast upon the workmen to supply the void; and then, too, there is the time and labour of those who have to act as the attendants upon the sick to be taken into account. These consequences become a serious matter when sickness prevails to any considerable extent among a ship's crew. The energies of the workmen are over-taxed, their hours of mealtime and sleep are interfered with; continued extra fatigue creates weariness and discontent; and this is the very state of system in which health is liable to suffer from influences which it has hitherto resisted. Sickness thus gives rise to sickness in more ways than one; and this, too, is apt to go on in a progressively increasing ratio. Obviously, therefore, the necessity of averting or preventing to the utmost all disease, and of preserving, as far as can be done, uninterrupted health among a ship's crew, cannot be over-estimated as one of the main objects to be aimed at by all who have at heart the duty of maintaining a powerful navy, ready at all times for the defence and honour of our country."

THE WEEK.

The sanitary history of the Peninsular campaign will prove, if ever impartially written, the most disgraceful in the annals of war. The army was composed of stalwart men, accustomed to physical endurance, and of an age best adapted to undergo successfully the ordinary privations of a military campaign. It was always within a few hours' sail of the great granaries of the north, and Government withheld nothing that its commander required, whether for comfort or even luxury. And yet that magnificently appointed army, in the short space of three months, lost one-third of its effective strength by diseases contracted by the most glaring neglect of sanitary measures. A correspondent of the London *Times* thus exposes our "military stupidity:"—

"To watch this war is disgusting, both to an educated soldier and to an honest man, for nowhere is to be seen more military stupidity and more dishonesty than in this brave American army. You must not wonder if I get warm and bitter. The whole muddle does not affect me personally in the least, but I cannot help feeling as a soldier and a man. You have not seen the poor fellows in the hospitals or returning from the camps, to die at home of sickness which might have been prevented by a little care and a little more honesty. Some that I have seen are, without being ill, emaciated and weak from sheer want. They cannot bear suitable food, from having lived for weeks on biscuits, bad coffee, and swamp water, and breathed the foul and poisonous air of swamp woods during their sleep. I am not very sentimental, and no Sybarite either; but my heart aches and tears fill my eyes on hearing the simple tales of those poor fellows, and looking into their emaciated faces."

—

It is remarkable to what a degree of health an army may attain which carefully heeds sanitary rules. The British army, even in the Chinese campaign, had a less mortality than the people of England at large. The following statistics of the mortality in other European armies are very interesting:

"The reports of the health of the Prussian army have been published. They show that in that army only 1 died out of every 144, being barely 70 in every 10,000 men. This includes suicides, accidents, and invalids. Without the former two classes the mortality was 1 in 166; and deducting also the invalids, 1 in 187. According to the locality, some remarkable differences in the mortality are pointed out. Thus the 1st Army Corps, which was in the Province of Prussia, lost 1 in 91 in the year 1860; the 8th Corps, in the Rhine Provinces, lost 1 in 289 in the same year, or less than one-third of what the 1st Corps lost. The like difference is said to be habitually found in the bills of mortality of the population of those two districts of Prussia. The mortality in the other European armies is stated as (in 10,000 men), in the Russian, 390; Austrian, 280; French, 190; Piedmontese, 160–170; English, 150; Belgian, 143. Then comes the Prussian army, the Danish and Saxon armies being about on an equality with it in this respect."

—

It is stated that Gen. Viele, Military Governor of Norfolk, Va., has organized the contrabands into "Broom Brigades" for cleaning the streets. These sanitary organizations regularly sweep the entire city, and Norfolk is now one of the cleanest cities in the United States. There is no danger of an epidemic in that town. Gen. V. is a citizen of New York, an active member of the Sanitary Association, and a thorough sanitarian. We venture to propose him as our next Mayor.

The Sanitary Commission commenced its session, at Washington, on Tuesday last. This is the first meeting of the entire body of Commissioners in several months, the details of business having been transacted during the interval by the Executive Committee. The Commission continue to furnish large amounts of supplies to the military hospitals, and in numerous ways meet the constantly increasing wants of the Army.

The Western Department of the Army seems to be under a rigid sanitary inspection. Assist. Surg.-Gen. Wood makes repeated tours for personal inspection of the hospitals and of camps.

Correspondence.

VOLUNTEER SURGICAL AID.

[To the Editor of the American Medical Times.]

Sir:—I have perused with much interest your editorial remarks respecting voluntary medical aid to the medical department of the army after sanguinary conflicts. It certainly is highly desirable that such aid should be so systematized as to be most wisely directed and most speedily and effectually applied; and perhaps there is no better method than the one which you have proposed for accomplishing these ends.

Having been cognizant of the results attending volunteer aid that has at various times been rendered after battles in the present war, I can bear testimony to its utility wherever such aid has been rendered in an unostentatious and proper manner. The plan adopted under advice of the War Department by the State Surgeons-General of New York, Pennsylvania, Massachusetts, and some other States, has worked very well. A high order of professional talent was thus placed at the command of the Medical Department of the Army. But it has been a noticeable fact that too many of that volunteer corps have made needless display of the petty authority which they presumed to have been conferred by their commission from the State authority. This evil, however, is slight in comparison with those attending such an indiscriminate call as was recently made by the Secretary of War, when Gen. Pope's dispatches from the battle-field of Manassas excited such fearful apprehensions of wholesale slaughter, that the entire population of Washington—a city within hearing of the battle's roar—was urged by public proclamation and alarming posters on every street to hasten instantly to the field from which the boasting hero of the west was supposed to be driving the foe, and leaving tens of thousands in their gore.

Though there may have been ample apologies for the excitement and the prompt response of the people of our profession, to whom the war-office addressed its startling appeal by every telegraph wire in the North, the War Secretary certainly had no proper reason for such a widespread summous of all classes to the work of relief for the wounded, unless his object was to ascertain how promptly and to what unmeasured extent the Volunteer Army could command such aid when needed.

As it was my privilege to see about one thousand of the medical gentlemen who responded to the call, permit me to correct an error which your remarks in the last No. of your journal are likely to propagate, to the discredit of all who proffered their services on that occasion. Though not all, and perhaps but few of those who went, were familiar with military surgery, I was particularly impressed with the evidence that all with whom I met had volunteered from the best motives, and would gladly do anything, and suffer any hardship for the relief of the wounded. And I cannot doubt that nearly all these gentlemen came on this errand at great personal sacrifices. Never can I forget the prompt reply of one of the most renowned of the Massachusetts volunteers, when at a late hour in the evening intelligence was received through a passenger directly from a company of wounded and famishing men, in a woodland near the Chantilly field where the heroic Stevens and Kearney fell. Said that physician, "Let me go to those men instantly! Though I am not a surgeon, I shall dress wounds, and give them such succor as they most require." That noble physician went that very hour, in company with two other physicians, and with ample supplies; and when on Monday morning, the seventh day after the battle, he returned with a train of ambulances, bringing all who had survived, fifty noble men, thus rescued, blessed him for his labor of love, which I heard a surgeon with a State commission and assumed military trappings, decline to undertake, because by this time the regimental surgeon who remained with those men, would probably have *finished all the surgery.*" [I am happy to believe this man was an exception to his corps.]

The noblest physicians who reached the field of Manassas, proved themselves the best Surgical Dressers, and most humane and competent attendants and helpers, and their profession afforded them the necessary military protection and aid.

It was observed both about Washington and at the battle-field that the Volunteer Corps from New York and Brooklyn, a company of between fifty and sixty in number, succeeded in accomplishing all they undertook, simply by virtue of being organized, and acting under an executive committee of three accomplished surgeons. They not only were without delay assigned to the care of a vast hospital, the Capitol and grounds, but I am informed that they succeeded in getting a detachment of nineteen (19) of their number to the battle-field with the first supply and ambulance train that reached the field under a flag of truce. And it is worthy of mention that their number was too small even to attend to the surgical dressings, while several of them are said to have been assigned to surgery under direction of Dr. Detmold, who, as their leader, had placed the whole detachment under Surgeon Cooledge's orders.

From what was seen here of the working and preparations for work by the hastily organized Corps from your city, and more especially from the sad disappointment of the hundreds who came from other cities and States without any organization or any plan of effort excepting to report in person to the Medical Bureau, the importance of some well digested system for all volunteered civilian aid to the Medical Department is rendered apparent. And from various considerations it would appear very desirable that each city and large town should have its special organizations, and that all of them be kept *en rapport* with the Surgeon-General of the Army, and with the State authorities, and that a certain number in each corps be always ready for instant orders. All physicians who are summoned to special service by the Surgeon-General, should be well remunerated when on duty. That generous impulse that would lead most civilian surgeons to give their services gratuitously, would with equal certainty and greater reason cause them to augment the hospital fund with the money offered for their labors by the government.

Senex.

Washington, D. C., Sept. 15, 1862.

Association of Medical Superintendents of American Institutions for the Insane.—The sixteenth annual meeting of this association was held in Providence, R. I., on the 10th, 11th, 12th, and 13th of June last. The following are officers for the year:—

President—Dr. Thos. S. Kirkbride, of Philadelphia.
Vice-President—Dr. John S. Butler, of Hartford, Conn.
Treasurer—Dr. O. M. Langdon, of Cincinnati, Ohio.
Secretary—Dr. John Curwen, of Pennsylvania.

A memoir of the late Dr. Bell was read by Dr. Ray.—*Med. News.*

Army Medical Intelligence.

REPORT OF DR. JOHN SWINBURNE, OF ALBANY, N. Y., ON THE HOSPITAL AT SAVAGE'S STATION, VIRGINIA.

(*Continued from page 153.*)

On or about the 8th July the Confederate authorities arrested the Rev. Mr. Reed, and, without making any specific charges, took him to Richmond. On the 9th I made a special requisition to Gen. Winder (Provost Marshal Gen. of Richmond), in accordance with Gen. Hill's directions, for a detail of two hundred of our men and rations for the same, to act as nurses, and for other purposes. About this time I visited Malvern Hill, and the hospitals in the neighborhood of White Oak Swamp, and found that most of the wounded had been removed either to Richmond or Savage's Station; and on my return to S. S., I found to my disgust and surprise that the Confederate authorities had arrested and carried to Richmond Mr. Brunot, his corps of nurses, and Mr. Howell, leaving us in a sad predicament in reference to our wounded. I again petitioned the officer in charge to the effect that he should visit Richmond in person, and solicit from Gen. Winder some of our men for nurses. On the 10th we received two hundred men from Richmond; with whom no rations were sent. Up to this time we had not sufficient materials for food. But now our rations being nearly out, and the Confederate authorities furnishing none, I made a requisition on the officer of the post for food. On the 12th our requisition for food was answered by sending us a limited supply of flour and poor bacon. We were compelled to make the best of our condition; and with these two hundred men we commenced at once to improve the sanitary condition of the hospitals and grounds.

On the 12th we had everything in good order and our men comfortable. At this time Dr. Johnson, Med. Purveyor, C. S. A., visited the hospital. He said he supposed we had been or soon would be removed. On the evening of the 13th a courier arrived at the hospital with a message for Dr. Guild, which he read to me. It consisted of an agreement between Generals McClellan, Lee, and their medical advisers (Drs. Letterman and Guild), to the effect that we would be paroled and sent to our lines by the most direct route.

Dr. Greenleaf of the U. S. A., and Dr. Guild of the C. S. A., were to arrange the time and place at which this parole should be carried into effect. On the 14th the Confederate officers informed me that an entire exchange of prisoners would take place; that an agreement between the Confederate and Federal authorities was made; that Gen. Hill of the C. S. A., and Gen. Dix of the U. S. A., were to arrange the preliminaries. On the same evening, Maj. ——, C. S. A., met me with a train of army wagons, filled with sick (from a hospital situate about a mile to the east of Savage's Station), en route to Richmond. He informed me that in the morning three hundred army wagons would be at Savage's Station to remove the sick and wounded to City Point, via Richmond, or to Richmond, and hence down the James river on flatboats to our transports. I protested against this inhuman manner of moving the sick and wounded. I took steps immediately to ascertain the truth of the statement, and procure a more humane mode of removal, as I then supposed, into our own lines. Since what had occurred on the previous two days, I had not the remotest idea that there would be any detention in Richmond; but, on the contrary, that they would be placed directly on board the flatboats and sent down the James river to our own transports. Had I supposed that they were to be detained in Richmond to receive the treatment they subsequently did, where many valuable lives were sacrificed, I should have sought an interview with Gen. Lee, and thereby have prevented this misfortune.

On the 15th Maj. Rodgers called with a train of cars, box and platform, saying we were to be removed to Richmond, then down the James river on flatboats to our transports. This day he removed over a thousand, including physicians and many nurses. During the afternoon, Dr. Johnson, C. S. A., called, took charge of all the stores, instruments, medicines, tents, etc., for which he gave me a receipt, saying the remainder would be removed the next day. On the morning of the 16th another load was removed, and in the evening a second train had just been loaded. Many of the most severely wounded were placed on platform cars, when we experienced the most violent storm of wind and rain, and which continued until late in the evening; the train arrived in Richmond about ten P.M., it still raining somewhat. Dr. Churchill, U. S. A., in charge, informed me that no one was present to receive them; no building prepared to put them in; that no food was prepared for them; no persons present to unload the wounded. The train was left outside the depot, and he, with the limited number of nurses, succeeded in removing those from the platform cars to the adjacent sheds and depot by three o'clock next morning. Here these poor wounded men remained, in the rain, wet and cold, with no blankets, no food, and, I may say, no shelter; many of them lying near the rails for forty hours. Dr. O. Munson, U. S. A., who had charge of one train, informed me that when good Samaritan women offered to supply the wounded with coffee, tea, or other nourishment, they were rudely driven away by the bayonet of the Confederate soldier. Then (under guard) he was conducted to prison, where he remained without supper or breakfast, while for dinner he had simply a little poor bacon and bread. He remained in prison until two o'clock the next day, when he was allowed to visit his patients, under guard. He found his patients had had no nourishment; no water to wet their wounds or to drink; and that their nurses had been taken from them. They remained in this condition until the afternoon of the 17th, when over a hundred of the worst cases were sent back to Savage's Station; the residue were sent to close and ill-ventilated hospitals, and several died before removal. Those who were returned to Savage's Station arrived late in the evening, and inasmuch as it was raining and they were in box cars, and the tents, what were left standing from the storm, were wet, I resolved to leave them where they were through the night. We therefore prepared them for supper—flour gruel, the only food we had—and then made them as comfortable as we could. The next morning we prepared tents and moved the patients to them. Being informed that we would stay some time at Savage's Station, and that those who were taken to Richmond were still there and would not be soon removed, we again made preparations for a long stay.

I had sent several surgeons to Richmond with the wounded, and learning (from Dr. Munson, U. S. A.) that about thirty U. S. surgeons were there in attendance, and were all kept in close confinement, and only allowed to see the patients under guard, and that every facility, including medicines, instruments, nurses, proper food, &c., had been removed from them, and they were then upbraided for not doing their duty; though we had sixteen left to attend (nearly half of whom were sick) on the three hundred and fifty sick and wounded at this place, I deemed it best to retain them, inasmuch as they could do no additional good, since they would be treated as the others were.

Up to this time we had been enabled to furnish ourselves with some fresh meat and soups from some beeves which remained in charge of the Rev. Dr. Marks, U. S. A., who had charge of a small fever hospital, of about one hundred patients, situate about a mile east of Savage's Station, the management of which requires some little notice; and though I have not a statistical report, I think it was the best managed and disciplined hospital in Virginia. But now the remnant of our own stock, including instruments,

medicines, &c., having been taken by the Confederate Medical Director, under the alleged impression that we were to have been removed at the time the rest were, we were obliged to depend upon the material furnished by requisition from Confederate authorities or by purchase with our own funds. Up to this time the officers had furnished the principal portion of their own subsistence by purchase. It then became a matter of serious consideration, knowing, as we did, that the rations furnished by the Confederates consisted of flour and poor bacon only. While food, necessary for the comforts of the sick, was very expensive and difficult to obtain, and the inhabitants were unwilling to sell unless for gold, and were also instructed from Richmond not to sell to the "Yankees;" so that it was very difficult to obtain a sufficient amount of food for the officers, and at the following exorbitant prices: Eggs, $1.50 a dozen; milk, 25c. to 50c. pr quart; butter, $1.25 pr. lb.; sheep, $8 apiece: other things in proportion. While at Richmond, tea sold for $10 and $16 a lb.; coffee, 120c. per lb.; sugar (common brown) $1.25; brown hard soap, 50c. for a piece 2 in. square. Other things proportionally high, including bread. In this dilemma, I wrote Dr. Guild, M. D., C. S. A., our condition and wants, who answered it by sending us, the next morning, Dr. Winfield, C. S. A., Medical Inspector Hospital, Camps, &c.; and accompanying him was Col. ——, an officer of Gen. Lee's staff, and sent by him. In answer to the inquiry of these gentlemen as to what we were feeding our patients, I stated that flour and bacon were their food, medicine, &c.; it was all we had; that our bacon, though limited in its supply, was absolutely maggoty. This statement was confirmed by Lieut. Lacey Stewart, C. S. A., commanding post. I referred him to the wan, worn, and exhausted countenances of the patients; that what little choice stores we had were removed by their own people on the 15th inst. They left, saying they would see to it, and send us all they could; that they had been providing us with rations the same as was supplied their own men; that they would also interest Gen. Lee in our behalf. In the evening they sent us a small invoice of medical stores; the first and only supply from the C. S. A. I will here state that nearly one hundred of the patients, then at Savage's Station, had recently been brought from a hospital, situate on the battle-field of Friday, 27th June, where they had lived on nothing but flour from the day of the battle up to the 16th of July, and hence were exhausted, and many moribund when they arrived.

This hospital was under the charge of the late Dr. Milner, U. S. A., who fell a victim to cerebral exhaustion, induced by this insufficiency of food.

In reference to the removal of the wounded men to Richmond and their subsequent treatment, Dr. Winfield, C. S. A., stated that they should never have been removed until paroled, and then sent directly to our lines; that their removal was not in accordance with Gen. Lee's or the Medical Director's wishes, and intimated that it was brought about by some meddlesome parties in Richmond who wished to exercise a little brief authority. But I gravely suspected that it was more a desire to make an exhibition of the "wounded Yankees" (as they familiarly called them) than it was a meddlesome interference. Still I cheerfully and fully exonerated Gen. Lee from any part or knowledge in this transaction.

I feel assured that all the deficiencies and difficulties which we experienced were not the fault of Gen. Lee or his medical staff, since all the generals and medical officers with whom we were brought in contact were unusually attentive to the necessities of the wounded and sick; but that there was a fault somewhere there is no question, and that fault I attribute to the inhumanity of the authorities of Richmond, and this fault has been a *fatal* one to *many* of our *wounded soldiers.*

In view of all the circumstances here set forth, on the 20th I summoned all the medical officers present to meet in order to devise some suitable means of sustaining and supporting the strength and thereby preserving the lives of the wounded remaining at Savage's Station. In the afternoon I visited several farmhouses in the neighborhood; found mutton and beef very expensive. From this time we made mutton soup in addition to the rations furnished, and which supply I kept up with my own funds.

This day for the first, Lieut. Lacey Stewart, commanding post, succeeded in obtaining in addition to the regular rations, some sugar, salt, and dried apples, the first and last they furnished. I have since learned that these things were drawn for his own command, and that they generously divided them with the wounded.

To-day (22d) Dr. Sutton, U. S. A., died exhausted from typhoid remittent fever.

On the 23d the Surgeons passed preamble and resolutions, and attended the funeral in a body.

I also visited some of the battle-fields and ascertained that none of our dead had been buried. They remained as they had fallen; simply sufficient dirt had been thrown over them to form a scanty covering, and in many instances hands and feet were still projecting, and many of the bones are now strewn about the field. This was true of all the battle-fields from Gaines' Mill to James river. This, together with the unburied horses, made the atmosphere very offensive and sickening to those in hospitals. One fact is here worthy of notice: while the Confederates removed all their wounded, buried their dead men and horses in some secluded spot, they failed to bury our dead at all, and at best left them exposed for several days, a loathsome spectacle to behold, and from the fact of its occurring on every battle-field from Gaines' Mills to James river, one would be led to suppose that it was done purely for effect. We noticed another fact, that our wounded were always left on the battle-field, not only till theirs had been removed, but their dead men and horses removed also. As an instance: some of the wounded of Monday (battle of White Oak Swamp) were left on the battle-field until Saturday, for which I could not see any palliating circumstances, nor could the enemy render any valid excuse.

On the 25th one of our surgeons, Dr. Milner, U. S. A., died very suddenly from inanition, induced by insufficient food. Upon this occasion I again addressed Dr. Guild, in reference to our condition.

On the 26th the surgeons met, passed appropriate resolutions in reference to his death, and attended his funeral in a body. At the same time I addressed Gen. Winder, and I received the following verbal answer: "He had nothing to do with us."

On the 26th, Lieut. Lacey Stewart, commanding post, went to Richmond, and in the evening returned with a train of cars, saying we must be loaded by four o'clock A.M., the following morning, to be transhipped to City Point the same day. The following morning, according to directions, we moved to Richmond, under the kind care of Dr. Cullen, C.S.A., and were carefully transferred in good ambulances to the Petersburgh Railroad Depot, from thence to City Point, arriving at that place about five P.M., 27th, and were soon shipped on board our own transports; this being the last of our sick and wounded from these battle-fields before Richmond, except some few minor cases. The next day (28th), I reported to Dr. Letterman in person, who said under the circumstances I had better report to you (Surgeon-General).

I herein append the names of the sick and wounded of those remaining at Savage's Station on Monday the 30th day of June, and those received at that time, and up to our departure (27th July), also the names of those who died as far as could be ascertained.

All of which is respectfully submitted.

JOHN SWINBURNE, *Surgeon in charge.*

WILD THYME IN WHOOPING-COUGH.—M. Joset says that an infusion of wild thyme will, in many cases of whooping-cough and affections of the air passages, remove the complaint when all other remedies fail.—*Med. News.*

Original Lectures.

LECTURES ON NEW REMEDIES AND THEIR THERAPEUTICAL APPLICATIONS.

DELIVERED AT THE
NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.
By SAMUEL R. PERCY, M.D.,
PROFESSOR OF MATERIA MEDICA AND THERAPEUTICS.

LECTURE IX.

OLEUM TIGLII.—CROTON OIL.

Gentlemen:—This substance is obtained from the fruit or seeds of a small tree, the Croton Tiglium, growing in Ceylon and the East Indies. There are three seeds in each fruit capsule, each about the size and shape of a small castor-oil bean, but they differ much in appearance from the castor-oil bean, being of a nut-brown color externally, and when this downy covering is rubbed off, showing a blackish shell underneath. When this shell is cracked, a kernel is found within, of a light brown color, and possessing no odor. The taste of the kernels is at first not very unpleasant, but the after-taste is acrid, unpleasant, and burning.

The oil is obtained by expression from the seed. There are two varieties in the market: that obtained directly from Ceylon and the East Indies, and that prepared by expression from the imported seeds in London. There is no croton oil prepared here.

The foreign or East India croton oil (oleum crotonis exoticum) is of a pale yellow color, transparent, and nearly of the consistency of castor oil. If equal volumes of this oil and pure alcohol of sp. gr. 0·798 are shaken together, the mixture becomes opaque and milky, the oil is not dissolved; but if heat is carefully applied the mixture becomes transparent, showing that the oil is soluble in hot, but not in cold alcohol. If this hot solution is allowed to stand for several hours, and become cold, it separates into two strata, the lower of which consists of the oil which has increased in volume by the absorption of a portion of the alcohol, and the upper containing the alcohol, which is somewhat lessened in volume.

The English croton oil (oleum crotonis Anglicum) is of a much darker color than the foreign, being of a reddish or chestnut-brown color. If equal volumes of this oil and of alcohol of the sp. gr. above mentioned, are shaken together, we have a uniform transparent mixture, which does not separate upon standing, unless exposed to a low temperature; the same separation then takes place as with the foreign oil, and with the same absorption of a portion of the alcohol.

Many theories have been advanced regarding the different behavior of the oil from these two sources, but as yet no satisfactory reasons have been given.

Many chemical investigations have been made to ascertain to what particular principle in the oil the cathartic property is due, and these investigations have been chiefly made in Europe with oil freshly expressed from the seeds. Dr. Schlippe (Annalen d. Chem. und Pharm. CV.) ascertained that the peculiar acid principle of the oil, crotonic acid, possessed neither purgative nor caustic properties, but that the peculiar odor of the oil was due to the decomposition of this acid. The caustic or pustulating property he found to reside in a resinous body, which is called *crotonole*, but this crotonole had no purgative action. He could not isolate the purgative principle.

He obtained the crotonole or pustulating principle in the following manner:—Croton oil is agitated with a sufficient quantity of an alcoholic solution of soda, to form a milky fluid; this is gently heated for some hours, and then, by the addition of water, or of solution of chloride of sodium, the milky oil particles are driven to the surface, where they unite to form a continuous oily stratum. This fatty oil is entirely got rid of by repeated filtration through a moist filter. From the filtrate, water and muriatic acid separate another oil, which is dissolved in cold alcohol, and mixed with fresh hydrated oxide of lead; by this means a flocculent precipitate is formed, which, towards the end, often cohcres to form a slimy mass. When the acid reaction has entirely disappeared, a little soda and a large quantity of water are added, by which the fluid is first rendered milky, but afterwards divides into a clear fluid and a clear oil, which sinks to the bottom. To attain this, an addition of large quantities of chloride of calcium to the alcoholic solution was frequently indispensable. The oil then separated is washed with water for some time upon a moist filter, and then dissolved in ether; the etherial solution is agitated with water in a cylindrical glass, the clear etherial solution is drawn off, and freed from ether, in a capsule in vacuo. The *crotonole* remains as a tenacious mass, resembling turpentine. It is colorless, or of a slight yellow color. The odor is weak and peculiar. In its properties it most closely approaches the alcohols. Croton oil obtained by pressure contained 4 per cent. of this crotonole.

That croton oil is not homogeneous in its composition is proved by the experiments of M. Dublanc. He sought to extract the acid principle from the oil, and with this view he agitated one part of oil with ten of alcohol, and allowed it to stand for some time. The alcohol dissolved six per cent. of the oil, and with it the acid, the coloring-matter, and a part of the pustulating principle. The undissolved oil had taken up a considerable portion of the alcohol. On separating the oil dissolved in the alcohol, it was more viscid, pungent, and acid than the original oil. On the other hand, when the portion of oil not dissolved by the alcohol is treated three times with alcohol, its volume is diminished, and it becomes entirely free from acrimony, and it may be taken in the mouth without producing any unpleasant local symptoms. It is soluble in all proportions in ether, and has a sp. gr. of ·92.

That portion of oil soluble in alcohol, when applied to the skin, causes almost instantaneous pain, and is soon followed by a blister.

On the Detection of Croton Oil in Mixtures.—In searching for a ready method for proving in oily mixtures the presence of croton oil, Prof. Maisch availed himself of Schlippe's researches, who, as we have before mentioned, without being able to discover the cathartic principle, found the rubefacient ingredient *crotonole* to be a resinous principle, which, together with other resins and free acids, is removed from the oil by agitation with an alcoholic solution of caustic soda, and then separated by neutralizing the solution with hydrochloric acid. Prof. Maisch followed strictly these directions, sometimes substituting for soda, caustic potassa, and sulphuric for hydrochloric acid, with the same results. Experimenting first with mixed oils, containing from one-eighth to one-tenth of croton oil, he afterwards operated with olive and almond oil, containing one drop to the ounce. The quantity of caustic potassa he regulated according to the amount of croton oil, or, if unknown, in accordance with the effects of the oil upon the skin. For oils insoluble in alcohol he used 85 per cent. alcohol, adding to it a sufficient amount of an alcoholic solution of caustic potassa, and agitated well. After separation had taken place, the alcoholic liquid was removed, and an equal amount of water added to it, and a sufficient quantity of sulphuric or muriatic acid. Soon an oily liquid rises to the surface, which, when applied upon the arm, produced, in the course of three or four hours, not only inflammation but also the pustular eruption peculiar to the action of croton oil. If the quantity was small the acidulated liquid was shaken with strong ether, the ether evaporated, and the residue applied.

For castor oil, and in the presence of volatile oils, he employed dilute alcohol, mixed with an alcoholic solution of potassa, and omitted the dilution of the decanted alcoholic liquid. The results were equally satisfactory;

and in this manner he detected croton oil in the so-called castor oil capsules. Croton oil may be detected in pills and emulsions in the same way. These preparations are first exhausted with ether, and the residue from the evaporation of the ether is employed.

Physiological Effects—on Animals.—In moderate doses croton oil acts as purgative, in larger doses it acts as a drastic hydragogue cathartic. In some animals, as the dog and cat, in full doses it produces nausea, vomiting, hypercatharsis, and pain in the intestines. Injected under the skin it acts more promptly and more violently, and the spot where the injection is made becomes very sore, and frequently sloughs. Injected into the veins a very small quantity acts as a powerful cathartic and emetic in a very short time, and if the quantity injected is large death ensues.

On Man.—If given in the dose of one or two drops, unmixed, it occasions an acrid burning taste in the mouth and throat, and if it has been allowed to remain for any length of time upon the lips they swell and become quite sore; in one or two hours it acts upon the bowels as a drastic purgative, causing three or four copious watery evacuations. In larger doses it produces nausea, vomiting, and hypercatharsis, and if the dose has been excessive, gastro-enteritis. When rubbed upon the skin it produces a peculiar pustular and vesicular eruption.

Medicinal Uses.—From the energy and celerity with which croton oil acts it is a valuable agent in removing accumulations within the bowels when such have not been produced by inflammatory action. In coma, apoplexy, and in cases where speedy and powerful catharsis is necessary, and in cases where from loss of consciousness a person cannot swallow a large dose of medicine; or in mania, where the patient frequently will not swallow anything in quantity, croton oil, from the smallness of the dose, and the ease with which it is administered, is especially serviceable. Whether in adults or children, in any disease where a powerful and speedy cathartic is needed, either to act directly upon the intestinal canal and remove accumulations, or to act as a counter-irritant to relieve other organs, croton oil will be found very serviceable. But in all these cases it needs to be administered with caution, as in overdoses it produces serious gastro-enteritis.

Rubbed upon the skin croton oil produces rubefaction and pustular eruption, and with this intent is used to relieve diseases of internal organs by producing counter-irritation. For this purpose it is most frequently used in diseases of the air passages, as in laryngitis, bronchitis, and pneumonia. It has been highly recommended in this way in rheumatism and neuralgia, but so far as my experience goes it should seldom or never be used in these diseases, as the amount of benefit derived is always doubtful and the suffering of the patient greatly augmented. It has been applied in this way over the abdomen to produce catharsis when medicines are rejected from the stomach, but I have never known it produce purging when applied in this way, and I conceive it to be a cruel and unnecessary suffering to the patient. To produce pustulation it is rubbed in with the finger or a piece of soft flannel or buckskin upon the part where pustulation is required, the friction being continued for ten or fifteen minutes; care should be taken not to extend it beyond the bounds required, as it nearly always spreads more than is necessary. The pure oil is sometimes used, at other times it is diluted with either castor or olive oil. If it is desirable to avoid the spreading of the pustulation it may be readily prevented by covering the parts desired to be protected by collodion.

Dose.—Croton oil may be administered to adults in doses of one to two drops as an active purgative, and as a milder aperient in doses from one-tenth to one-half drop. To children it is required in rather larger proportionate doses.

Mode of Administration.—The most preferable form of administration is in pill, because in this form it may be taken without taste and without irritation in the mouth and fauces. The proper vehicle for forming it into pilular form is dried and powdered soap; if a proper quantity of this be taken and the oil dropped upon it pure, manipulation in the mortar will form it into pill mass. It should always be made fresh, as by keeping it in this way the oil soon becomes rancid Although in pill form it acts more rapidly, still it acts more harshly than when given diluted with castor oil, or when given in alkaline emulsion. My favorite way of administering it is to rub up the desired quantity with a small quantity of sugar so as to divide it thoroughly, then dilute liquor potassæ is added, adding three drops of liquor potassæ in a drachm of water to each drop of oil. This is well rubbed together until the oil is partly saponified, then half an ounce of almond emulsion is added and the whole flavored with the essential oil of bitter almonds. Castor oil capsules and jelly are made which owe their activity to a small quantity of croton oil.

Original Communications.

THE DISTINCTIONS BETWEEN A VIRUS AND A POISON.

By W. H. THOMSON, M.D.,

MEDICAL REGISTRAR OF BELLEVUE HOSPITAL, AND STATE MEDICAL INSPECTOR.

[Read June 2d before the N. Y. County Medical Society, and published at its request.]

(*Concluded from page 160.*)

We think we have adduced enough to show that whatever viruses may be, they cannot be justly classed with poisons. A negative demonstration is sometimes, in medicine, a great advantage, second only to positive discovery, for little else has delayed medical progress so much as the confounding together of entirely distinct morbid processes. Certainly virous diseases present a great many phenomena, which are wholly peculiar to them, and as we have shown, they are not simply distinctive characters, which may serve to difference them from other diseases, but they are the very essence of the diseases themselves; and as none of them enter into the constitution of other maladies, least of all in the processes of poisons, viruses must therefore form a class by themselves. And what an interesting class it is! Repeatedly have the nations trembled at these Messengers of Death, as they issued from the Gates of the East, on a westward march which none could hinder or stay; and at every turn, wherever we meet our fellow men, we may encounter some one of these fearfully potent agencies, causing, like the agents of human contests, the greater destruction in the greater crowd. The question, what is their real nature? can be surpassed by none in importance, in the whole range of medical science. Unfortunately, when we begin to essay its answer, it is no longer like proving what they are not; for we so far can have recourse to speculation only, though in this we have very many elements of presumptive evidence. In the first place, we think there is very strong ground for recognising in the essentials of viruses, the characters of organic life—a period of germination, then a period of development or growth, and then a period of reproduction, evidenced also in their capacity of self-propagation; and we should like to listen to an explanation of any one of these successive elements of viruses, by a pathologist who holds them to be mere physical agents like poisons. Again, viruses are affected in their development by variations, often inappreciable to our senses, in their soil, climate, and season, as only organic growths are. Thus we continually see in the vegetable kingdom the same seed showing every degree of development, owing to causes which are more often unknown than known—thousands of seeds never coming to anything, others growing most luxuriantly but a few feet from where they are small and dwindling. One year, the crop is great, the next season it is every way inferior; while the same plot which brought forth abundantly in one month will not yield a blade in

another month; and still further, the same soil will refuse to yield any more of a product for which it once was famous. We need not repeat the characters of viruses in close analogy with all these familiar facts. Ever since viruses have been observed at all, their variations of type and season; their irregular development in different constitutions; their failure to develop at all in others; their general indisposition to develop in the same soil again, have been observed and noted with wonder. In the same epidemic also, the cases at the height of the epidemic are more violent than at its decline, just as the last of any crop are the poorest always. The single remarkable fact, that it is their rule to occur but once in the same system, would by itself make us suspect that we were dealing with nothing simply physical or chemical; for it is inconceivable why such will not always act, just as arsenic will inevitably act at any time and anywhere, in July and December, in Calcutta or London. But in *growths*, analogies with these peculiarities are frequent enough, for the exhaustion of some one ingredient which the most careful chemistry often cannot discover, suffices often to prevent a reproduction of the same seed in the same soil where it had grown before. The forms of vegetable life are often limited to certain climates, hemispheres, countries, and small localities; and similarly certain virous diseases are like the plague, which never crossed the meridian from the Persian Gulf to the Caspian Sea on the east, or the longitude of Tangier on the west. Others again are found only in Arabia, or Poland, or India, or even in certain towns only, as the strange ulcer of Aleppo, which we have ourselves witnessed.

The question then arises, if we admit the relationship of viruses to the living organic kingdom, under what division of that kingdom should they be classed? Do we find any great family of organisms to whom we can ascribe such undesirable connexions as the tribe of viruses? We think there is one, and only one, but it is one that answers all our requirements, for its spread is so universal, multiform, and diffusive, that we would a priori have looked for some one of its myriad subdivisions as given to entering animal bodies and then multiplying at such a rate, as to cause the most serious complications. Let a drop of pure distilled water be but preserved long enough from evaporation in any part of the world, where it will not freeze, and in a very few hours it will be filled with all manner of shapes and forms of a vegetable life, all of whose infinite varieties have been lumped together as fungoid growths. When the microscope first revealed this new world, it seemed as if it could be accounted for only by spontaneous generation; but no respectable authority maintains that hypothesis now, although the contrary obliges us to believe that we must inspire untold millions of living germs with every breath we take, and swallow corresponding growths with every drink. Then to calculate how many of the *seeds* of these things there must be in a single inspiration, if those that develop are in the same proportion to those that do not, as in other vegetable forms, would require a line of figures as amusingly incomprehensible as the miles of astronomy. But we are not left to conjecture, that some of these forms may be the causes of the destruction of other living forms. Repeatedly do epidemics of fungoid growths suddenly overrun countries and continents, generally from the East, to the great damage of mankind in all their valued crops. Mildew and rust, the great potatoe disease, and latterly, the vine oidium, of a few years since, which not only desolated the vineyards of Asia and Europe, but without appearing to develop in them to the naked eye or microscope, yet caused nearly every form of fruit to be sickly and dwindling, are proofs enough that new species of fungoid growths can arise to the destruction of other forms of life. But we have proofs besides of *animal* organisms being destroyed by the development of fungoids which we can see for ourselves sometimes, and sometimes with the microscope. The price of silk is as often affected by the appearance of a fungous epidemic in the growing silkworm as is that of flour by a fungus in the growing wheat stalk. The common housefly frequently gives up the ghost for the same reason, and can be seen turned into a bed of beautiful fungoids. Now, it is a suggestive fact, to answer an objection liable to arise, that the microscope has failed to reveal fungi, any more than animalcula in virous diseases, that the initial stages of these very fungoid diseases of plants and animals which become *finally* palpable, are wholly invisible. The sporules of some huge mushrooms even, have never been discovered. Now, considering how infinitely varied are the forms of these low vegetable organisms, does not analogy favor the hypothesis that there are fungoid growths, finding their conditions of development in animal bodies, which are invisible in *all* their stages, just as all but the *concluding* stages are invisible in many fungi that are causes of disease to other organisms? A vast number of these fungoid growths are developed in fluids, in the various processes of fermentation, but which all have a hidden period of "incubation" in these fluids, during which, unseen, they are causing the greatest chemical changes in them, until finally the cryptogamous plant reappears, multiplied thirty fold, and with each of its million sporules endowed with the capacity of working the same changes in the next similar fluid into which it may fall.

Another peculiarity in these low forms of vegetable life, is a remarkable facility of altering their forms and characters (and therefore the effects which they may produce), from difference in their soil and habitat. Thus no one, before Mr. Lowe demonstrated it by actual experiment, would have suspected that the Achorion Schönleini of the favus disease was the same product with the totally different looking aspergillus glaucus of yeast. But Mr. Lowe transplanted the former from a scald head to a piece of dough, and it went through its stages of growth with greatly accelerated rapidity over its progress on the scalp, and finally turned out a true torula cervisa. Now, this affords a very interesting analogy to a remarkable fact in the great type of virous diseases, which fact by itself should suffice to make us suspect we were dealing with an agent entirely distinct from a poison. The rank and deadly variola transferred from the human system, where it develops with disastrous energy of growth, to the system of a cow, becomes transformed by its new soil into the mild and trivial vaccinia, which runs a much shorter and less tumultuous course. But though its new habitat has altered many of its most prominent features, it still retains its identity with variola, as it leaves the same specific life impress upon the system.

But this capacity for change of form and properties, by changes of the condition of growth in fungoids, offers us a very plausible explanation of a great fact in viruses, which no other theory even attempts to explain. The lower the vegetable forms, the greater the facility of generating *new species*, by bringing together old forms under new conditions. But this principle obtains even in the higher orders of plants, and horticulturists, by taking advantage of it, are continually bringing forward new varieties of flowers and fruits. Now, it seems almost certain that through the continual working of this principle, new forms of fungoid growths are coming into existence all the time, some to be permanent perhaps, but the vast majority to soon give place to others. Some of these new forms may have capacities for multiplying in directions, where the original ones could not grow at all—a familiar fact in higher vegetable forms than fungoids. Now, hardly any one doubts that this is the true explanation of the origin and prevalence of all the *vegetable* epidemics of history. The potato disease did not begin till a certain date and in a certain quarter, and then it coursed in every direction where it could find potatoes. Did any philosopher arise to demonstrate that this new disease was begotten by the action of the rain and sun upon the manure of potato fields? The answer, which he could not answer, would have been, why then did not the Irish famine occur in 1827 instead of 1847? So we may ask, if Typhoid Fever is generated by dirt, why did it not prevail in Constantinople before the French

soldiers came to the Crimean war? Why does it not prevail in Damascus now—for it does not to our personal knowledge—and yet, would that a great Sanitarian could be sent to investigate the dirt of those cities, venerable piles as ancient as those of the Pharaohs.

We will say, in conclusion, that it has appeared to us that one reason that the cause of virous diseases has not been sooner discovered is, that with all theorists they seem to be regarded as exclusively *blood* diseases, while to us it seems as if the blood was on the whole the freest from them of any part of the system. Analogy with fungoid growths would lead us to fix upon the *tissues*, especially the outer ones, as the seat of their development, and so we find the great majority of them develop in the epithelial structures, the skin, and mucous membranes. The fact also that the lymphatic system, which takes its rise in the tissues, is almost always first affected, points in the same direction; and on this account, not to mention others, we cannot accept Liebig's theory that they are owing to a blood fermentation.

We have no opportunity, from having already drawn so largely on the time of the society, to more than indicate the important bearing that our views of the pathology of virous diseases must have on our treatment; for if the morbid conditions of these diseases are the results of an animal *poison*, we should treat them so, by antidotes if possible, but as that can rarely be the case, by promoting their elimination by evacuants or eliminatives. On the other hand, if they are the results of a process of *growth*, we have a wide field yet to investigate whether we cannot beneficially modify these growths, as in vaccinia, or when they come out on the surface about them, as variola pustules with nitrate of silver, or else dwindle their growth by charging the system, if practicable, with agents whose presence we know to be unfavorable to fungoid life, as mercury, muriatic acid, chlorine, creasote, or the sesquicarbonate of ammonia. Oils, in great contrast with sugars, are very unfavorable to fungi, and we have questioned whether the comparative freedom of the ancients from these diseases may not have been owing to the ancient practice of daily inunctions. Certainly in many of the eruptive virous diseases, daily inunctions are very beneficial. At least, if they are growths, we can soon learn their stages of growth, and therefore watch the times of the greatest danger, or the most likely conditions to favor complications.

78 W. 47th st.

REPORTS ON

SOME RECENT IMPROVEMENTS IN MATERIA MEDICA AND THERAPEUTICS.

By EDWARD H. JANES, M.D.,

OF NEW YORK.

VI.

ANILINE.

As this artificial alkaloid has recently been brought to the notice of the profession as a remedy of some merit in the treatment of chorea, a brief account of its history and properties, together with its physiological and therapeutical action, may not be altogether uninteresting to the readers of the Medical Times.

Aniline was discovered by Unverdorben in the year 1826, among the products of the dry distillation of indigo, and hence its name derived from the specific name of the indigo-plant (*Indigofera anil*). In 1837 Runge first announced the existence of three volatile bases in coal tar, which he named kyanol, leukol, and pyrrhol. Kyanol was afterwards demonstrated by Hoffman to be identical with aniline, and its extraction from the liquids that distil at a high temperature from coal tar has since been a fruitful source of its supply for industrial purposes. From these oils distilling at 150° to 250° C. aniline is obtained in the greatest quantity. The process, however, is an exceedingly complicated one, and those who are curious for information on the subject are referred to the *American Journal of Pharmacy*, March, 1861, or to the *London Chem. News*, Sept. and Oct. 1860. A more simple method, and one by which large quantities of aniline may be obtained, is its artificial preparation by the reduction of nitro-benzole. This is done by the action of sulphide of ammonium on the alcoholic solution of nitro-benzole, or by the action of nascent hydrogen, acetate of iron, or a hot alkaline solution of arsenious acid. The latter method (Wöhler's) has the advantage of the others for brevity, and is as follows: a solution of arsenious acid in a strong ley of caustic soda is placed in a tubulated retort, heated to the boiling point, and the nitro-benzole dropped in, and is at once transformed into aniline which distils over, and by saturating it with an alcoholic solution of oxalic acid pure oxalate of aniline is obtained. When pure, aniline is a colorless, oily liquid, astringent, has an aromatic odor, and an acrid burning taste. It is slightly soluble in water, and very soluble in alcohol and ether. It boils at 360° F. and does not freeze at —4°. It forms salts with acids. It decomposes the salts of iron, zinc, and alumina, precipitating the oxides. It precipitates the chlorides of mercury, platinum, gold, and palladium.

The physiological action of aniline has been the subject of experiment by Dr. Schuchardt, from which we learn that frogs introduced into a weak solution containing aniline, died in periods varying from a quarter of an hour to two hours and a half, and death was caused by introducing aniline into the mouth, or into a wound in the back. A small rabbit was killed by fifty drops in six hours and a quarter, and one hundred drops killed a large one in four hours. All of the cases were attended with violent clonic and tonic spasms, a loss of sensibility, commencing at the lower extremities and extending to the upper, and a reduction of the temperature of the body. It is not detected in the urine, but is probably eliminated from the body by the organs of respiration. A case of poisoning is published in the *Med. Times and Gazette* by Samuel Knaggs, Esq., caused by the man's breaking a carboy filled with aniline, spilling the contents over him and on the ground. None got into his mouth, but the fumes were freely inhaled as he spent some time in endeavoring to remove all traces of the accident. Mr. K. was called in the evening, and thus describes the case: "On entering his cottage I found him in bed, apparently at the last gasp. His face and whole body was of a livid, leaden hue; the lips, gums, tongue, and eyes of a corpse-like bluish pallor; he was taking a gasping breath, as I thought, for about the last time. I poured instantly two ounces of brandy down his throat, and then used cold affusion liberally with very good effect. After this I had his chest, legs, and arms covered with mustard plasters, and for three hours he took half an ounce of brandy every quarter of an hour, and at the seventh minute a strong dose of ammonia and chloric ether, whilst with every third or fourth inspiration I made him inhale strong ammonia." This plan was pursued throughout the night with little variation, and by morning his livid hue was fading and he was soon well. In this case there was no convulsion, he was perfectly sensible, and able to give a correct account of his feelings.

The sulphate is the form in which aniline has hitherto been prescribed, and may be prepared by several processes. Mr. Proctor recommended the following: Take of aniline 500 grains, sulphuric acid 250 grains, distilled water four fluid ounces. Mix the acid with the water, add the aniline, and agitate them together until a thick magma is formed and the odor of aniline has nearly disappeared. This is now washed with strong alcohol until the free acid and coloring matter are removed; then, having pressed the drained salt between the folds of white filtering paper, it is dried in the dark. If wanted in crystals the white pulverulent sulphate thus obtained is dissolved in boiling alcohol, which is allowed to cool slowly in a covered vessel in a dark place; the crystals, when formed, should be drained on filtering paper and dried in the dark. It may also be made by dissolving the aniline in two fluid ounces of alcohol 95 per

cent., then having mixed the sulphuric acid slowly with two fluid ounces of the same liquid, when cool add it to the solution of aniline. The sulphate thus formed is washed with cold, strong alcohol, pressed in bibulous paper, and dried in the dark.

Sulphate of aniline is described, when pure, as an odorless, colorless, crystalline salt, changing color and yielding the odor of aniline if exposed to light and air, and decomposed at a temperature above 212° F. Water at 60° dissolves about six per cent. of its weight.

Dr. James Turnbull, of Liverpool, published in the *Lancet* of Nov. 16, 1861, some account of his experience in the treatment of chorea with the sulphate of aniline. He was led to make trial of it from the fact of its being an alkaloid, from which he inferred that it would act energetically on the animal economy, and probably on the nervous system; and also from the fact of its being present in Dippel's animal oil—an old antispasmodic remedy, which Pereira says is undoubtedly a very powerful agent, having been used in hysteria and other affections of the nervous system accompanied with convulsive movements. Dr. Turnbull proceeds to relate six cases of chorea in which he had used this alkaloid successfully; the first of which is as follows:

"Ann P——, a girl aged thirteen, was admitted into Liverpool Royal Infirmary under my care on the 7th of June, 1860, on account of the most involuntary twitching movements which characterize St. Vitus's dance and which affected all the limbs. She had been ill for three months. She was first treated with purgatives, and then successively with iodide of iron, cod-liver oil, the shower bath, which is often of great service, and, lastly, with sulphate of zinc. None of these remedies, however, appeared to be of any use. On the contrary she got worse, and the violence of the convulsive movements became so great that she was confined to her bed, in which it was a difficult matter to fasten her. She also lost the control of the muscles of the tongue so completely that she was unable to speak. On the 6th of August, two months after admission, and five from the commencement of her illness, the movements had become so constant, tossing her about in all directions, that they threatened to exhaust the vital powers, as sometimes happens in this singular disease; and I thought the case, therefore, a fit one, after having used the ordinary means, to make trial of a new remedy. One grain of the sulphate of aniline was ordered to be taken in solution, with a little sulphuric acid, three times a day. In three days there was a decided diminution in the violence of the movements, and afterwards a gradual improvement. The dose was increased to two grains, and it then caused some depression and a peculiar blueness of the lips, which I have since remarked in several other cases. The medicine was omitted for two days and resumed in the smaller dose. On the 30th of August she had so far recovered that she could walk well. She had also regained the control of the muscles of the tongue, so that she could put it out, and she had recovered her power of speech. On the 10th of September she had entire control of her limbs. They were almost perfectly still, and she was considered cured."

The second case was that of a young woman aged eighteen, who had not menstruated for twelve months, was constipated, and all of the limbs were more or less affected with convulsive movements. The bowels were first opened with compound jalap powder and calomel followed with sulphate of aniline, one grain three times a day, afterwards increased to one grain and a half. She recovered rapidly, and afterwards the catamenia were regulated with decoction of aloes and steel mixture.

The third was a girl of seventeen, in whom the disease was brought on by a fright. The same treatment was pursued as in the other cases, which resulted in a cure in about fourteen days.

The fourth was a stout girl aged eleven, with twitching movements of nearly all the voluntary muscles, to whom the sulphate of aniline was given in doses of one grain and a half three times a day. For the first eight days there was no relief afforded, when a purgative was ordered, and the following day a double dose of aniline administered by mistake gave to the lips, face, and hands a deeper blue color than he had observed in any other case. There was a diminution in the movements, and she continued gradually to improve.

The sixth case is interesting as illustrating the connexion between chorea and rheumatism. The patient had previously suffered from a severe attack of rheumatic fever, and when admitted to the infirmary she had convulsive movements and partial loss of power of the lower limbs with inability to speak. After a purgative of compound jalap powder and calomel, one grain and a half of sulphate of aniline was ordered three times a day, when the involuntary movements began to subside. Her general health was improved by good diet and porter, and the remnant of her rheumatism was afterwards treated with quinine and iron. She got quite well. In all cases where a sufficient dose had been taken a peculiar blueness of the lips, tongue, and nails, and a dusky appearance of the countenance were observed. In one case where an overdose of three or four grains was taken the blueness of the hands extended above the wrists. This fact may prove of interest in serving as a guide to the proper extent of administering the remedy. The discoloration here noticed, unlike that produced by the administration of nitrate of silver, disappears soon after the medicine is discontinued, and is supposed to be due to the sulphate of aniline being oxidized in the blood and producing a blue dye, and is best seen in parts provided with a thin mucous covering, as lips, tongue, etc. The success attending its employment in the treatment of chorea has suggested to some its use in other nervous affections, as epilepsy, spasmodic asthma, catalepsy, etc., all of which present a good field for investigation, and one in which the remedy would seem worthy of a trial.

Reports of Hospitals.

NEW YORK HOSPITAL.

I. DISLOCATION OF ASTRAGALUS OUTWARDS, WITH FRACTURE OF THE EXTERNAL MALLEOLUS.—II. URINARY CALCULI REMOVED THROUGH AN ENLARGED URETHRA.—III. AMPUTATION OF ARM FOR INCISED WOUND OF WRIST.—IV. GUNSHOT WOUND OF THIGH; AMPUTATION.—V. STRANGULATED UMBILICAL HERNIA; OPERATION.

[Reported by F. D. Stedges, M.D., House Surgeon.]

I.—*Dislocation of Astragalus outwards, with Fracture of the External Malleolus.*—E. H. Lord, æt. 25, a native of N. Y., a salesman by occupation, was admitted during the service of Dr. Halsted on the 7th of September. The patient, just previous to admission, received an injury of the right ankle by jumping from a car while it was moving at a pace hardly as fast as a person would naturally walk: the platform from which he alighted was not more than three feet from the ground.

On examination, nine hours after the accident, the right foot was found adducted on the leg almost to the degree seen in varus, the sole of the foot looking somewhat inwards and its inner edge upwards. The fibula could be traced near its extremity, where it terminated in an abrupt sharp edge, from which it would appear that the summit of the bone had been torn off. Anterior to the malleolus the head of the astragalus was felt prominent, with the skin tightly stretched over it. The tibia could be traced down to the inner malleolus, where the bone was so deeply buried as not to be distinguished throughout its whole extent. An abrupt bony edge was felt immediately below it anteriorly, which corresponds to the posterior edge of the navicular bone. Posterior to this, and separated from it by a depression, was another bony spur, which corresponded to the process of the os calcis. There was considerable swelling present. Under the influence of ether the motion of the

foot and leg laterally was quite free; no crepitus could be felt in the examination. Between the posterior edge of the internal malleolus and the tendo-Achillis, the thumb could be pressed into a deep depression.

Reduction.—While extension was made by seizing the foot above the heel and over the instep, and counter-extension kept up above the ankle, Dr. Halsted, with thumbs applied over the head of the astragalus, passed it back and into its place. The parts then resumed their natural relations. The inner malleolus was found entire, while the separated extremity of the outer malleolus could be distinctly felt and moved about under the thumb and fingers. The limb was put up in lateral profile splints, and an evaporating lotion applied.

II.—*Urinary Calculi removed through an enlarged Urethra.*—Kate Connor, æt. 50, a native of Ireland, stated that ten years ago she began to suffer from attacks of pain, which, starting from the left side, extended to the bottom of the pelvic region, being most intense in the bladder. About three years ago, and during one of these attacks, while seated in a warm hip-bath for its relief, a calculus, as large as a small butternut, escaped from the bladder. For some time previous to this occurrence she had had a great deal of pain following micturition, the desire for passing her water being almost constant. Not unfrequently, while in the performance of this act, the stream would be suddenly stopped. From the time of passing this stone the pain in the pelvis and bladder were very much relieved, until last June, when they again appeared, and continued to distress and annoy her up to the time of admission about two months after. On the 6th of August Dr. Halsted introduced a female sound, and found that the cystic extremity of the urethra was nearly if not quite occluded by a hard and rough substance. A diagnosis of urinary calculi was made, and a consultation was called with a view to decide upon an operation. The surgeons agreed to the utility of such a procedure, and the necessary preparations were made. Previous, however, to commencing the operation, Dr. Halsted, having satisfied himself as to the unusual capacity of the urethra, resolved to attempt the removal of the bodies, if possible, without recourse to incision. He accordingly passed up a stone forceps through the urethra into the bladder, and removed without difficulty six large calculi, varying in size from a small chestnut to a small butternut. The patient, with the exception of a slight attack of diarrhœa and incontinence, which, however, lasted only a few days, recovered rapidly, and was discharged cured on the 1st of September.

III.—*Amputation of Arm for Incised Wound of Wrist.*—Timothy Moore, æt. 25, engineer, was admitted July 9th, in the service of Dr. Parker, having a short time previously received an injury by falling down a gangway, and striking his hand on the edge of a drawing knife. The wound thus inflicted was three inches long, commencing in the palm of the right hand, and extending into the wrist to the depth of an inch or more; there was considerable venous hæmorrhage. The wound was closed by sutures, and cold water was applied. The parts having swelled considerably, the sutures were removed on the 11th inst. On the 18th erysipelatous inflammation of the tissue of the forearm and lower portion of the arm began to show itself. On the 21st a large abscess formed in the cellular tissue of the forearm, and was opened, discharging a large amount of pus. The discharge continued gradually to increase, so that by the 6th of September the patient became so much exhausted that amputation was advised. This measure, however, the father would not consent to until the 8th. The operation was performed by Dr. Halsted at the junction of the middle and upper thirds of the arm by the circular method. The wound was closed by sutures, and cold water dressings were applied. The patient reacted well, and for a day or two promised to recover. On the night of the third day, however, colliquative sweats began to show themselves, and continued at longer or shorter intervals until he died on the 16th inst. exhausted.

IV.—*Gunshot Wound of Thigh, Compound Fracture of Femur; Amputation of Thigh.*—Alpheus Peaslee, æt. 23, Maine, private Co. I, 22d Mass. Vols., was admitted July 22, 1862 (Dr. Parker). Patient was wounded at Gaines Mills, June 27th, by a musket ball which passed through the left leg. On examination the ball was found to have entered the thigh in front, at the junction of middle with lower third, and passed out in the same region posteriorly. In its course it had produced a comminuted fracture of the lower portion of the os femoris. There was considerable discharge from the posterior opening of a somewhat unhealthy character.

Treatment.—Extension was applied by means of a weight and pulley. The limb was brought in a good position. Owing to excoriations, which showed themselves July 27th, along outside of leg, the extension was discontinued. General condition of patient much improved since admission. Discharge more healthy. About the 1st of Aug. the patient began to lose ground; there was considerable burrowing about the fracture, and the discharge, besides being increased, was sero-purulent. Nourishing diet and quinine were ordered; stimulus ad libitum. He continued to grow worse, and on the 10th of August was very much debilitated from the alarming amount of fetid discharge from the wounds. Aug. 13.—Patient more feeble, pulse 118 and compressible; vomits occasionally. Ordered injections of beef-tea, quinine, and brandy every six hours. On the 14th, a consultation being held, it was agreed to remove the limb, patient's condition being better than the day before. He was accordingly etherized and removed to theatre. Dr. Halsted performed the operation, removing the limb at a point about two inches above the junction of the middle and upper thirds. The tissues were found in a very unhealthy condition. There was a rather large amount of hæmorrhage (arterial and venous), despite the tourniquet and the manual means of compression. The pulses at the wrist ceased several times during the operation. Fifteen minutes after the operation, pulse 150 and scarcely perceptible, reacts very slowly. Ordered enemata of beef-tea and quinine every half hour, and brandy, amm. carbonas, and champagne pro re nata. Aug. 15th.—Patient gradually sank, and at half past two o'clock in the morning died.

V.—*Strangulated Umbilical Hernia.*—Edward Buckinthal, æt. 48, Germany, saloon keeper, admitted August 26, 1862 (Dr. Halsted), stated that for ten years past he had been liable to umbilical hernia. The protrusion had frequently taken place, and until the present time has always been readily reduced. He had since its first appearance habitually worn a truss. Patient further states that on the afternoon of August 24th, while driving a spirited team of horses, the hernia suddenly made its appearance, and that as soon as he arrived home he used taxis as he had on former occasions, but was unable to reduce it. Professional aid was not procured until the morning of Aug. 26th, when taxis, under chloroform, was persevered in at one trial for an hour without effect. At 7 o'clock P.M., Aug. 26th, he was brought to this institution. On examination the tumor, which was of the size of a large orange, appeared to be an entero-epiplocele. No further efforts were made at reduction. He suffered considerably from pain and dyspnœa. The attending surgeons having arrived at 11 o'clock the same night, patient was etherized, and Dr. Halsted proceeded to operate. A longitudinal incision, four inches in length, was made over the pendent portion of the tumor, and on exploring the parts with the finger the aperture in the linea alba was found to be about three-quarters of an inch from the umbilicus, above and to the right of it. The contents of the tumor confirmed the diagnosis as to its character. The incarcerated parts were highly congested, though there were no appearances of mortification. The opening was extended a little at both ends, and the hernia readily reduced—edges of wound brought together, and deep sutures introduced, pads, straps, and body bandage applied. Aug. 27th.—Two hours afterwards, 1 A.M., reaction having taken place, the pulse becoming very rapid and full, the respiration hurried and difficult, a free opening was made in the

external cephalic vein, which bled, however, only about five ounces. Another opening was then made in a superficial vein on dorsum of arm, from which about five ounces more were drawn. Opium, gr. ij., were then administered, and opium, gr. j., every two hours, ordered. At 10 A.M., patient not appearing much better under its influence, opium, gr. j., every hour, was ordered. At 3 P.M., patient having come considerably under its influence, opium, gr. j., every three hours, was ordered. Respiration, 19; pulse, 85. At 10 P.M., patient is not so well, complains of abdominal pain; countenance anxious; respiration 33, and very labored; pulse, 116; ordered, opium, gr. j., every hour and a half, sinapism to chest, and cold applications to head. Aug. 28th. —8 A.M., patient rapidly sinking; pulse 120; respiration, 33; extreme dyspnœa; still conscious; continue treatment.

At 10 o'clock this morning patient died.

Post Mortem, held twenty-four hours after death, reveals acute peritonitis, with disorganization of the strangulated portion of omentum.

Progress of Medical Science.

PREPARED BY DR. P. F. C. DESLANDES.

THE DIAGNOSIS AND TREATMENT OF HYDATIDS OF THE LUNGS AND THE PLEURA IN CHILDREN.

(*Continued from* p. 147.)

In the second case, the character of the expectoration leaves one doubt as to the nature of the disease. Its long duration, and some of the functional symptoms, might have led us to believe in the presence of tubercular degeneration, or that the physical signs, localized at the lower part of the chest, denoted chronic pleurisy, with effusion. But as it has been said above, the matter expectorated, apart from the march of the symptoms furnished us, had a pathognomonic character; without carrying further a difficult investigation, we could ascertain, beyond doubt, the existence of a hydatid cyst of the thoracic cavity, a large bag which had long been emptying itself through the bronchial tubes. But what was exactly the seat of that bag, and what its origin? Was it an hydatid of the liver (the hepatic gland is, of all the viscera, the one in which these cysts are most frequently developed)—was it, I say, an hydatid cyst primarily formed in the liver, developed on its convex surface, and which, in its further increase, driving back the diaphragm and the lungs, had at last separated the muscular fibres, and penetrated the cavity of the thorax; and making its way through the pleuræ and pulmonary tissue, had reached the bronchi, where it had poured its contents, brought out afterwards by expectoration? The absence of symptoms from the liver, of disturbance of the digestive organs of the uterus; the normal volume of that organ as ascertained by percussion, and the palpitation, made me give up this idea.

Was the pleura the primary seat of this hydatid? It has been admitted, it is true, that there are cases where the bag has first formed in the pleural cavity and remained there, only pushing back the lung without invading the parenchyma. Perhaps it was so in the case of our little patient during the first period of the disease, when the concomitant physical signs had led to diagnosticate a pleurisy. However, hydatids are rarely primarily formed in the pleura; and although several cases which seem authentic have been reported, and amongst others, the first of Mr. Davaine, we are disposed to admit with that physician, that, in these cases, the mention of a cyst (and this mention is almost always made) authorizes us to doubt the formation of hydatids in the pleural cavity itself. Analogy would even lead us to think that, in the cases in question, the first origin of the acephalocystic tumor must be looked for in the extra-pleural cellular tissue, when the morbid product has not been formed in the pulmonary parenchymæ. But to determine this precise point of origin, we would require detailed cases with the opportunity of following the anatomical changes in their successive evolution, and these cases are wanting; moreover, the distinction is difficult even at the post mortem, when the tissue of the thoracic walls, the pleuræ, and the lungs, are adhering, and are confounded by the progress of the acephalocyst.

Let us add that the great frequency of hydatid cysts in the right lung and at the base of that organ, must lead us to think that intra or extra-pulmonary cysts arise often from the liver; this was as early as 1829 the opinion of Mr. Cruveilhier, who wrote in his remarkable article on acephalocysts:—"I am convinced that a large number of expectorated acephalocysts, of which there are many examples in authors, came from the liver." But here again the lacunæ in the anatomo-pathological description of the majority of cases, forbid us to decide if an hydatid bag referred to the pleura, because it has attained in this serous cavity its greatest development, and is not in reality a migrating cyst.

Had the hydatids, on the contrary, been formed in the pulmonary parenchymæ? Whatever may have been the starting-point, was there, at the time I made the examination, an extra-pulmonary hydatic bag, with driving back of the parenchyma, and formation of a pulmonary fistula through which the helminths had passed to reach the bronchi, or else was the cyst contained in the parenchyma itself, and had a development itself there; was it *intra-pulmonary?* I could not affirm to either of these two suppositions! However, the absence of stethoscopical phenomena, which I should have perceived at the time of the evacuation of the hydatids through the bronchi, the absence of the signs of which indicates the presence of a cavity in the lungs, which should have been present, since for months the patient has been expectorating remains of hydatic vesicles, made me inclined to diagnosticate an *extra-pulmonary hydatid.* We know, indeed, that when hydatids of the thoracic cavity, situated outside of the parenchyma, driving the lungs before them, destroy it at last, and make their way to the bronchial tubes, adhesions are previously formed, and a fistula more or less oblique takes place. The obliquity and the narrowness of the fistulæ break, prevent the access of air in the hydatic bag after the evacuation of the hydatids, and consequently no stethoscopic phenomena are manifested, which may reveal the presence of the fistula, and of the cavity in which it opens.

The very large number of hydatic vesicles which were thrown up during the course of the disease; the distinct periods at which true *hydatic vomicæ* occurred, the stationary condition, and even the increase in volume of the humor in the ultimate period, notwithstanding those almost incessant evacuations, are so many circumstances, which would lead me to suppose that the intra-thoracic cyst was not unilocular; or at least that it was multilocular, and that the diverse critical periods observed during the course of the case corresponded to the successive rupture of several different vesicles (independently of the variable secretion of the liquid). This is a peculiarity to which enough attention, perhaps, has not been paid, and which deserves to be taken into consideration in view of the prognosis, and of the therapeutic indications, as is done for other varieties of cysts, and particularly for cysts of the ovaries.

If we wished to treat the interesting questions arising from our five cases, we would have to discuss the clinical appearances mentioned; to show, for example, that this *hydatic pulmonary phthisis*, so like tubercular consumption, that, in the case of our five patients, it was mistaken for it by two practitioners of the greatest merit, presents, however, in some cases, a peculiar character which might strike the *attentive physician.*

If we have an intra or extra-pulmonary hydatid tumor, having no communication with the bronchi, the physical signs will at first lead us to suppose the existence either of a solid tumor of the lung or of a pleural effusion. But a

more precise examination, the study of the commemorative signs, the consideration of the age of the subject, etc., will enable us, in some cases, to collect the elements of a differential diagnosis, the principal features of which have been indicated by M. Vigla. But after this elimination, the difficulty will only be put off; for we shall then have to establish whether the collection of liquid recognised be an hydatid cyst, or one of the diverse varieties of chronic effusions of the chest.

This will always be a problem, and so much more difficult to solve, that the two affections may be found united, or at least the hydatic bag containing sometimes enough liquid to be considered as a true effusion. However, if we carefully follow the steps of M. Vigla, it will sometimes be possible for us, taking into account the character of the dyspnœa, whose march is slow and progressive; of the extensive and persistent pain, of the peculiar and anormal kind of dulness corresponding to the tumor, of a certain irregularity in the development of the latter, and consequently of the unequal dilatation of the affected side; taking also into account the frequent absence of some stethoscopic figures, such as ægophony and bronchial respiration, and also the mode of its first appearance, some peculiarities of its ulterior evolution, etc.; it will be possible, I say, to form, in some cases, an almost certain diagnosis. Let us add lastly, that the existence of a collection of liquid into the thoracic cavity, whatever may be its more precise seat, being admitted and well established, there will generally no longer be any contra-indication to make an exploring puncture which would definitively settle the question.

In cases where an intra-thoracic hydatid has opened in the bronchi, and where there remains a bronchial fistula communicating with a lesser or larger cyst, there exists in reality a cavity in communication with the external air—since cough and vomiting expel the contents of the tumor. We should be able, then, to perceive the stethoscopic phenomena which reveal the cavities, and this would be a new difficulty if the nature of the expectoration did not indicate immediately and more positively the nature of this cavity.

"I think," says Laennec, speaking of cysts of the liver opening in the bronchi, "that in this case all the phenomena of pulmonary cavities, I mean the cavernous râle, cavernous respiration and cough, and even the transmission of the voice through the tube of the stethoscope, might manifest themselves in the region of the liver." Laennec had only had once the opportunity of verifying the correctness of this rational diagnosis, which he applied beforehand to all the coughs communicating with the air-passages: Dr. Beaugendre, of Aquimperté, had shown him, in 1821, a lady convalescent of an affection of the chest during which she had expectorated a large number of acephalocysts. There was still some cavernous rhonchus to be heard in the part occupied by the cyst.

As to the stethoscopic phenomena which should be perceived after the expulsion of the hydatids, M. Davaine simply says: "You shall probably hear the bruits proper to the entrance of air into a cavity, or those of pneumothorax, when the cyst shall communicate with the bronchi;" and it is remarkable that in all his rich collection of facts we find but one single case in which some physical signs analogous to those met with in pulmonary cavities are mentioned, and this case is that of Beaugendre and Laennec.

In my own cases the stethoscopic symptoms expected were wanting. In one they were completely absent, and after, as before, the opening of the hydatic bag in the bronchi, auscultation revealed only the decrease or the abolition of the vesicular murmur belonging to chronic pleurisy. In the other the humid rhonchus heard on a level with the large right bronchus during the evacuation of the worms, had nothing characteristic, and was not accompanied by any of the ordinary symptoms of cavities; the absence of the vesicular murmur continued to be the prominent symptom.

It follows from the fact we have just laid out, that, in cases of expectorated hydatids, auscultation sometimes reveals the habitual symptoms of pulmonary cavities, and thus marks out the spot where the rupture of the cyst and the communication with the bronchi has taken place; sometimes, on the contrary, it only gives negative results.

From the absence of the bruits which indicate the presence of a cysto-bronchial fistula, could we not presume that we had here, not an hydatid of the lung, but an extra-pulmonary cyst, either primarily formed in the thoracic cavity, or come from the liver, the fistula being in these cases, and particularly in the latter, narrower, longer, more sinuous, more easily closed, and consequently in conditions less favorable to the production of new acoustic phenomena?

(To be Continued.)

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

STATED MEETING, June 11, 1862.

(Reported by FRANCIS V. WHITE, M.D., Secretary *pro tem.*)

PNEUMONIA AND PLEURISY.

DR. J. LEWIS SMITH presented the lungs of a child, aged 13 months. Wet-nursed. Health previously good. Thin spare habit. Three weeks previous to death, he had convulsions, lasting from 8 A.M. to 5 P.M. with slight intermissions, when they ceased. The symptoms of severe inflammation occurred. Respiration hurried and labored. Cough short and frequent. Pulse accelerated. The usual treatment was adopted. He became more and more prostrated and emaciated, and finally died of exhaustion. During a considerable part of his sickness, his pain was more acute than ordinary in inflammatory diseases of the lungs. He had no convulsions after the first day, but during the last two or three days of his life he rolled his head. He retained consciousness and sight to the last.

Post-mortem.—The contents of the cranium were found normal, with the exception of two or three points of fibrinous deposit, and a moderate opacity of the membranes at the outer portion of the fissure of Silvius on both sides. The left lung was healthy, with the exception of hepatization of posterior portion of its lower lobe, extending about half an inch into the organ. On the right side, the outer surface of the lung, with the exception of a narrow strip along the anterior border, was adherent to the ribs. Soft fibrous deposit of a quarter inch in thickness. No pleurisy at the base of the lung, nor upon the surface adjoining the mediastinum. The pleuritic effusion under the microscope consisted entirely of fibrine, no pus cells being seen. There was the appearance of pus. Under the large part of this exudation was healthy, and there was but a moderate amount of hepatization in the posterior part of the lung. The hepatized portions under the microscope disclosed numerous oil globules. Mucous membrane of the bronchial tubes was moderately inflamed. Abdominal organs healthy. *Points of interest*—The extensive amount of the pleuritic effusion. Whether the pleurisy in the case should be considered primary? The pleurisy being in excess, rendering it probable.

REMOVAL OF FATTY TUMOR.

DR. POST presented a fatty tumor, removed from the acromial region of a female, aged 38 years. Its enucleation was not as readily accomplished as is usual, on account of the depth of its interlobular spaces, and the toughness of the areolar tissue. It was of eight years' growth. There was nothing further of note in the case, except that she was mother of an infant of two months, and also would not avail herself of anæsthesia in the operation. There was not much hæmorrhage.

SIMPLE HYPERTROPHY OF THE HEART.

Dr. Austin Flint presented a specimen of simple hypertrophy of the heart, for which he stated his indebtedness to Dr. Dudley of Brooklyn. The history of the case as obtained from Dr. Dudley was as follows:—A young man aged 23 years, having always had good health, left his home in Brooklyn directly after breakfast, to walk to the ferry on his way to his place of business in New York. He was observed to stagger and fall, and died before he could be removed to a a station-house near at hand.

The post-mortem examination was made by Dr. Gilfillan of Brooklyn, eight hours after death. The face was turgid and livid, blood oozed from the nostrils and both ears. The incision through the scalp and the removal of the calvaria occasioned profuse bleeding. The vessels of the superficies of the brain were excessively engorged. No extravasation of blood, no abnormal accumulation of liquid in the cavities. The brain substance was everywhere firm and not abnormally vascular. The lungs were healthy. The abdominal viscera were considerably congested; otherwise healthy. The kidneys were of the normal size and presented a healthy appearance. The heart is a fine specimen of simple hypertrophy. Its weight is 15½ oz. The left ventricle at the base measured by Dr. Gilfillan was found to be 1⅛ inches in thickness, and at the apex ⅞ inches. The right ventricle measured ⅝ inches. The cavities were not increased in size. The aortic valves were found to be sufficient by the water test. The mitral valves were apparently sufficient, nothing abnormal being perceived but a few small atheromatous spots. The other valves were normal together with all the orifices.

The points of interest in the case were considered to be, *First*, The existence of such an amount of hypertrophy without enlargement of the cavities and without valvular lesions in a young subject. *Second*, The absence of any symptoms during life which pointed to cardiac disease. The person had always had excellent health, was able to take active exercise without deficiency of breath or palpitation. Dr. Dudley had known him from boyhood, and he had always been apparently in perfect health. During the past winter he was accustomed to skate without inconvenience. *Third*. The occurrence of sudden death. Dr. F. supposed the immediate cause of death to be apoplexy from cerebral congestion. How far the hypertrophy of the heart may have contributed to the engorgement of the vessels of the brain, he was not prepared to say. In this connexion it was to be stated that the young man had been for some time under mental excitement consequent upon his entering into a new business arrangement, and on the day of his death he was for the first time to take upon himself the new duties. In view of the youth of the patient, Dr. F. was inclined to think that hypertrophy existed in the case as a congenital affection. There was no atheromatous deposit about the brain.

Dr. Sands then related a case of sudden death occurring in Bellevue Hospital when he was interne. The patient, a man, had been admitted previous to the night visit; on examination, found nothing urgent, gave him a Dover's powder for the night. During the night was called to him, and found him dead. The nurse stated that the patient, being previously comfortable, was suddenly seized with difficulty of respiration, tore his clothing violently from the neck, became blue in the face, and expired in about five minutes from the commencement of the attack. The autopsy revealed the existence of a small amount of consolidation at the apex of the right lung, which was the only lesion noticed. The larynx and trachea were carefully examined, but beyond a moderate injection of the blood-vessels in the mucous membrane of the former organ, the parts were in a perfectly normal condition. In the absence of any satisfactory physical explanation of the cause of death, it was his conjecture that this might have been due to spasm of the glottis.

Dr. Post inquired, if the superficial effusion was sufficient cause of death?

Dr. Flint answered affirmatively, and related a similar case in his practice.

Dr. Finnell stated that he had frequently made autopsies for Coroners, of persons found dead in bed, and had found congestion of the brain and simple hypertrophy of the heart. He, in these cases, gave as the cause of death, the congestion of the brain. He did not think that simple hypertrophy was a sufficient cause of death.

American Medical Times.

SATURDAY, SEPTEMBER 27, 1862.

THE EFFECTS OF THE WAR UPON THE MEDICAL PROFESSION.

The commencement of the preliminary term in our various medical colleges naturally enough leads us not only to take a prospective but also a retrospective view of the effects of the war upon the medical profession. The demand which has been made on the profession during the present contest has been so great that we have now in the field almost an army of surgeons by themselves. Now it is but fair to admit that the absence of this large number of professional men from their respective spheres of duty must certainly be felt by the public at large. There is not a single community, however small, which perhaps has not suffered from it, and which does not call for the filling of a vacancy left by some practitioner. And notwithstanding so many have gone to the field, the want of surgeons is still felt for the charge of the vast number of recruits which are now being mustered under the last call of the President. This continual need for surgical services must, in a measure, be supplied; and, if the law of political economy be true with reference to the relation between demand and supply, we may expect to look for a large number of recruits to our ranks. The number of students should be increased and our colleges should be crowded. Already, evidences are not wanting to show that the inducements which government holds out to young medical men to enter the army are duly appreciated. In fact we know of very many who, upon the supposition that the war is to last for a long time, are willing to commence the study of medicine almost with the sole view of entering the army.

Every young practitioner, who is dependent upon his own exertions, has very often a very hard struggle for a livelihood, and it is doubtless the knowledge of this fact which keeps many from starting out in the pursuit of a profession which they dearly love. At this time, however, this objection is removed; a young man, if he be found competent, can obtain a position at once in the army, and receive a very substantial salary. This must have its effect upon many of our students of medicine who have barely the means to procure for themselves an education, and will doubtless be the turning-point in the career of many a future distinguished practitioner. A noticeable effect which the war has had upon the profession as a body is the great impetus which it has given to study. The institution of strict examinations as proofs of competency has exacted it of every one who desired to enter the service. This has been especially the case with those who had not been in the habit of study, or who were, in a word, Routinists.

With all general practitioners, however, the text-books have been freely called in requisition, operations have been rehearsed, dissections made, and the knowledge of military surgery has become an acknowledged necessity. Altogether the work has been an earnest one. Can any one fail to see in this a certain elevation of the tone of the profession? We may well be proud of the amount of actual knowledge possessed by us as a body, compared with what it would have been had no necessity called forth our sleeping energies. The chances for the practice of surgery have been unequalled, and it has been the pride of every surgeon to make the best of such advantages.

Another effect of the war has been to reduce to its proper level the practice of homœopathy. Rampant for distinction and loud in the demands for justice, the followers of this system of quackery earnestly sought recognition by the government and a place in the army, and at one time it did almost seem, through the strenuous exertions of certain unprincipled politicians, that their request would be granted. But in the discussion of the matter a fair comparison was made between the results of the two systems of practice by actual statistics, and we have seen the result. The authorities have performed the solemn duty which they owed to our soldiers, and the regular system of practice triumphantly takes its stand as the only one legitimately under the patronage of the government. The significance of this fact has not been lost upon the community at large, and has doubtless tended more to crush out the claims which the charlatans have urged for favor than anything else which could have been done. A rather surprising effect of this decision of the government has been apparent in the decrease in numbers of this class of practitioners. It being a regulation that none but regular practitioners are eligible for examination, very many of the homœopathists have been tempted to turn heretics to their faith in the hope of obtaining positions.

As the war lasts, and as larger numbers of our profession become actively engaged upon the field, we may hope to raise the standard of professional attainments still higher, and when it shall have ended we can count at least one thoroughly competent surgeon to each little town of the Union. Very many of our older practitioners needed brushing up, our distinguished surgeons increased opportunities, and our younger men occupation and remuneration. The war has supplied all these wants.

THE WEEK.

The New York Pathological Society, after a vacation of two months, has resumed its regular meetings, and we are again able to continue the publication of its proceedings. Though somewhat behindhand in the matter of dates we have endeavored to have the report of each meeting appear as soon as it has been approved. It will be remembered that this body have agreed to publish all their official reports in this journal, and that it has been their intention, in time, to issue a separate volume of Transactions. This work has been fairly commenced, and though a considerable time must necessarily elapse before it is completed, we can, when that time comes, promise for it a warm reception by the profession. The promptness with which the task of preparation has been accomplished reflects the highest credit upon the gentlemen composing the committee of publication.

The *British Medical Journal* thus comments upon the subject of gratuitous medical services. The topic is one which should justly claim the attention of the whole profession.

"We have so often expressed a most unqualified opinion on this subject, that we need hardly say how fully our sympathies and convictions go with him in this matter. We do verily believe that, if any assemblage of our profession would give themselves up to a full, a deep consideration of this subject, the large majority composing it would infallibly be driven to the conclusion that there is no one cause more powerfully operative in degrading and injuring our profession than the system of gratuitous medical services. The arguments against the system are, to us at least, overwhelming; and we can most truly say that we have yet to learn one single argument, worthy of the name, which can be adduced in favor of it. The mischiefs resulting from this cheapening of medical services are not merely direct, and confined to the pecuniary loss immediately involved, but they reach far and wide, and can be traced, by those who will carefully investigate the matter, injuriously operating in directions where *primâ facie* they seem to have no connexion.

"Regarded from our point of view, the system of gratuitous medical services is a system which benefits the few, and seriously damages the profession at large. It degrades us in the eyes of the public; and lessens in their esteem the value of our services. The public take us at our own valuation. It is founded on an injustice and an absurdity—on the iniquity of a laborer laboring without a laborer's due reward. A very large amount of these services is, admittedly, rendered by us on the purest principle of selfishness; we throw them out as sprats, for the purpose of catching mackerel. But, not to argue the question in all its fulness at the present moment, we will content ourselves with throwing out one question for the serious consideration of those who think the system a good, a great, a useful, and an honorable one to the profession. We would ask: If gratuitous services are all you say of them, surely you will admit that there must be some kind of limit to them, some line drawn where they should cease. The warmest admirer of gratuitous services will not, we are sure, venture to say that these services may not, under certain circumstances, become very wrong and improper—injurious alike to him who gives as well as to him who receives them. Now, we would ask: Is there a man in the profession who does not know, who is not ready to admit, that a large amount of such services are daily being thus improperly—we mean, *improperly* even in the eyes of those who approve of properly given services—given to the public? We are sure no one of us will deny this. Then, such being the case, it follows that every member of the profession—including those who approve of *proper*, and those who reprobate gratuitous medical services altogether—is agreed in this, that a large amount of gratuitous work is done improperly by the profession: therefore, that even those who approve of the rendering of a certain amount of gratuitous services, ought, by their own showing, to join in the work of *distinguishing* the evil."

—

The city of San Francisco has subscribed the sum of $100,000 for the use of the Sanitary Commission. At no time could such a magnificent donation be better timed, and in no better channel could it be thrown for doing the greatest amount of good to our soldiers. Money and other necessaries are being largely offered from both public and private sources, but there is no danger that the supply will be too great. It is truly encouraging to see how willingly and readily the public at large respond to the wants of the Commission. It proves in a substantial manner the confidence they have in the integrity and administrative ability of the body.

Correspondence.

PUBLIC DRINKING-FOUNTAINS, AS MEMORIALS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—Few men have attained to a more just celebrity than the late Surgeon-General of Ireland, SIR PHILIP CRAMPTON. His name is associated with most of the recent public sanitary improvements in the metropolis of Ireland. Last week a fitting memorial was erected to his memory in Dublin, in the shape of a very handsome drinking fountain. The Earl of Howth, as the representative of the contributors to the fund, handed it over to the Lord Mayor and Corporation for the benefit of the citizens. The following appropriate inscription (*London Lancet*), by Lord Carlisle, is placed upon it:—

"1862.—This fountain has been placed here, a type of health and usefulness, by the friends and admirers of Sir Philip Crampton, Bart., Surgeon-General to her Majesty's Forces. It but feebly represents the sparkle of his genial fancy, the depth of his calm sagacity, the clearness of his spotless honour, the flow of his boundless benevolence."

The *Lancet* adds: "Exception has been taken to the propriety of the memorial by some members of the public press; but we are at a loss to discover on what grounds their opinion has been formed."

Fitting memorial! Would that some thousands, which do not serve to beautify Greenwood, had been expended as wisely. The stone and the marble would then have been most usefully elaborated, and the names of the dead, in many instances very deserving of memory, held in grateful and constant remembrance. Though language less adulatory than the monumental inscription above quoted, would fitly commemorate a greater than Crampton, the New York public would gladly excuse an inscription of like character upon any similar monument in our thoroughfares where thirst could be assuaged.

A few years since, at the suggestion of one of our profession, public provision was made for supplying the thirsty. Some cast-iron pillars were placed in connexion with the Croton here and there at considerable expense. Originally devoid of beauty, and now indifferently cared for, their existence even is known to but few citizens, and they are resorted to only in desperation.

Within a brief period, the London *Illustrated News* has furnished many pictures of public drinking fountains erected in thronged places at great expense and as beautiful as art could devise. This has generally been done by public-spirited and benevolent persons; and so much importance has been attached to these enterprises that their completion and transfer to the public has been the occasion of imposing ceremony.

There is one spot in this city about which the recollections of the good and the learned will frequently linger. No. 1 Bond Street, now devoted to municipal charities, is to many classic ground. If the friends and admirers of him who made the locality interesting, would follow the example of Crampton's friends, how beautifully, appropriately, and usefully would the name of Dr. Francis live among us and our children. Eminently useful in promoting sanitary measures for the good of his native city, his name should not be allowed to pass soon from our memories. What more effectual means could be adopted to secure its preservation, and lasting good from his example, than to place near where he daily walked a beautiful and well kept drinking fountain upon which should be written his name and virtues. Indirectly, he would long continue to do good to mankind—his delight while living. The poor would bless his name, as did their progenitors; and many who now resort to the dram-shop as the only place to allay their thirst, and there drink poisonous compounds, would thankfully drink their cup of cold water.

E. E—.

NEW YORK, Sept. 16, 1862.

FOREIGN MEDICAL INTELLIGENCE.

SINCE the blast of King James against tobacco, it is such a novelty to hear anything said or written in extenuation of its use, that I cannot refrain from reporting the following commendatory and hopeful notice of this much used and abused plant. While M. Beau proscribes the baneful weed under pain of some horrible chest-affection, another doctor calls loudly for the suffrages of the Academy of Sciences in order that a tobacco-shop may be established in every school or college in the land of France. The measure would, without doubt, be welcomed by the *concierges*, and well patronized by the students of the said establishment. But I must not speak irreverentially of the matter, for the author is a man of note, since he is a member of the *conseil general*. It is M. Demeaux, so well known for his recommendation of coal-tar for the disinfection of ulcers. Now M. Demeaux has discovered that the unrestrained usage of tobacco would disinfect society of an ulcer physical and moral, much graver and more extended than all the sores in the sea of surgery, the sore of onanism. He has proved in statistics gathered from his very extensive practice, that during the last twelve years onanism has decreased in a most notable manner; he has proven besides, a proportional improvement in the general health of the male population. Evidence of this, results not alone from his own observation, but from the statements of the *conseil de revision* for military service. The number of young men good for service, has gradually increased for the same number of years. It is to the usage of tobacco that M. Demeaux ascribes the honor of this diminution of onanism and the general amelioration of the public health; and it is as consequence to these premises that he prays of the Academy to sanction tobacco-smoking in boarding-schools, colleges, and in all places where severer masturbators are likely to be.

M. Rayer finds the syllogism of M. Demeaux very bad; he can see no connexion between the two things of which it is the question.

M. Flourens remarks, that it is prohibited more than ever to smoke in boarding-schools: he sees in this habit a *certain* for a very *uncertain* result.

M. Velpeau finds himself overcome by the singularity of M. Demeaux's proposition, and only begs that his opinion will not be solicited.

M. Dumas says: Why attribute the improvement in humanity to tobacco rather than to sugar, meats, or wines, the consumption of which has augmented quite as largely as that of tobacco?

The *prestige* which M. Demeaux has so honorably gained for other inventions, has not saved him in this his latest, from the significant apathy of his colleagues. They have set him out in the cold; and I should array my pen against such insult, did M. Demeaux only explain how the smoking of tobacco cures onanism. He prescribes a remedy, tells the benign result, but makes no allusion to the *modus operandi* whereby this result arrives. Does evil cure evil, will the fusion of two vices be beneficent, or does smoking act on man as catnip on cats, antiphrodisiac?

The following new treatment of the bite of a rabid dog, is to be credited to DR. NICOLE, *Chirurgien de l'Hospice d'Elbeuf*:—For the cauterization by *fer rouge*, for the suction and the cupping which have been long advised to destroy or remove the virus from the bite, he proposes to substitute another method prompter of execution, less painful, less repugnant, and more efficacious. It is just simply to introduce in the wound the nozzle of a small syringe and make liberal suction. In this manner the virus is taken up with blood, and after cleansing carefully the syringe inject a strong solution of caustic. A cupping instrument is not always at hand, and is not applicable to every part, but the syringe is ever to be found, and has the advantage of being more *searching* after the virus by reason of its penetrating to the bottom of each indentation left by the animal's teeth.

CYGNET.

FOREIGN CORRESPONDENCE.

LETTER XII.

By PROF. CHARLES A. LEE.

Ventnor, Isle of Wight, July 22, 1862.

Many years ago I read the excellent work of Sir James Clark, "On the Influence of Climate in the Prevention and Cure of Disease," and in that work I remember that this region, called the "*Undercliff*," was especially recommended, as affording a favorable climate for persons laboring under, or predisposed to, pulmonary affections. At that time, this place, now so crammed with beautiful villas, contained only about half a dozen humble cottages, inhabited by poor fishermen; now it is the capital of the Undercliff, crowded with hotels, churches, shops, cottages, and villas, built in every conceivable style, and filling every nook and corner where it is possible to place a building. Sir James spoke of it as one of the most picturesque spots along the coast, as it undoubtedly is; huge hills towering up many hundred feet behind it, while the platform, on which it began to be built, is broken up into several uneven terraces; the ground running in smooth slopes down to the broad, smooth beach, mingled, however, with steep, abrupt banks of rock, down which a brawling rivulet hastens on its journey to the sea.

The region which goes under the name of Undercliff, extends about seven miles on the south shore of the island, from Blackgang to Dunnose, consisting of a platform varying from half a mile to a quarter of a mile in width, bounded on the south by the undulating bays and promontories of the channel, and on the north by a perpendicular wall of grey rocks, which form the buttress to a range of downs, from three to eight hundred feet high, covered with luxuriant grass, and pastured by innumerable sheep.

We have here all the constituents of a beautiful landscape —rich vegetation, elevated hills, secluded and romantic dells, and ever varying ocean; but we have also a climate differing essentially from that of England, the temperature during winter being much more moderate and uniform than can be found in any part of Great Britain during the same season. Its situation protects it completely from the north and north-easterly winds, and hence the whole region, from Luccomb Chine to Chale, is peopled with visitors every fall and winter, chiefly from England and Scotland, though some from the United States and the northern parts of Europe. There seems to be but one opinion among those who have spent the colder months in this region, that the climate is on the whole very favorable, and the neighborhood most agreeable to the invalid. Here there is every temptation to take exercise in the open air, for beauty meets the eye on every hand—here, where the green slopes sink deep into bays and valleys, opening like a theatre to the sun and the sea; here presenting a terrace of low land at their feet, which stretches under the shelter of that high perpendicular wall, like a rich garden plot all roughened over with masses of rock-fallen in distant ages, and overshadowed with thickets of myrtle, roses, geraniums, heucheras, fuchsias, etc., which all grow wild in great luxuriance and profusion, and need no protection during the coldest seasons. Thorns, chestnuts, and ash trees are abundant; the jagged cliffs are covered with ivy; and primroses, cowslips, and hyacinths, are thickly scattered over the well watered glades. I must not, however, dwell on the beauties of the landscape here presented, which have been pointed out by so many writers, but limit myself to some few observations in regard to the supposed advantages it presents to the pulmonary invalid. Sir James Clark, if I rightly remember (not having his work at hand), represents the climate of Torquay, on the English coast, as softer, more humid, and relaxing, while that of the Undercliff is drier, somewhat sharper, and more bracing. In general, perhaps, this description will hold true, but it is very evident from the location of the Undercliff, as may be seen on a map, that this region is pretty fully exposed to the cold, damp, easterly winds, which come down the Channel, and that it cannot be exempt from those sudden atmospheric changes so frequently experienced on the neighboring coast. One disadvantage it must always labor under, which I witnessed and experienced myself, and that is, the excessive dampness occasioned by a condensation of the vapors brought by the northerly and westerly winds, which, striking upon the lofty mountainous downs, roll their thick vapors down the cliffs, saturating everything in doors and out, as if immersed in a vapor-bath. Leaving Ryde in the morning, in the latter part of July, the thermometer standing about 60°, and the wind blowing fresh from the northwest, I had no sooner reached the vicinity of the downs and the Undercliff, than the vapors began to roll down the hill like an impenetrable mist, saturating my clothes with wet as if exposed to a heavy rain, and indeed it was often impossible to say whether it was mist or a fine shower; it, however, terminated in a continuous, undoubted rain, of some hours' duration, while the distant coasts of Hampshire and Sussex were doubtless enjoying a clear, sunny day. Further inquiry satisfied me fully that my surmises, thus originating, were correct, and that with all its other favoring influences, the Undercliff must suffer more or less from atmospheric changes, if not perpetual damp. A lover of the hydropathic system would be delighted with Ventnor, etc., for he would always have his *wet sheets* without extra trouble, and a cold vapor bath any time by removing the dress. Visitors, of whom I have made inquiry, all testify to the great dampness of the climate on the southern shores of the island; and one gentleman at Southampton told me he never stayed over night at Ventnor without taking cold from sleeping in damp sheets. Now, I am not able to say how great a drawback this feature in the climate of this favorite resort may be, in pulmonary cases, but I apprehend that in true tuberculosis a drier atmosphere would be more favorable. In purely bronchial affections, however, there can be little doubt that such a climate would exert a more favorable influence than one containing less moisture. The soothing, relaxing effects of a moist atmosphere in such cases, is well known; while in tubereular phthisis, the progress of the disease would be probably hastened. The fact that a temperature of 54° F. was experienced on the 22d of July, while a greatcoat and fires were essential for comfort, proves that during the winter solstice the atmospheric conditions here may sometimes be such as the invalid would be glad to exchange for some others of a different kind. I will, however, perhaps resume this subject, and present more positive data.

Vichy, France, Aug. 21, 1862.

While our good friend Hanbury Smith is dealing his excellent artificial Vichy water from his two perpetual fountains in Broadway and the Fifth Avenue, let me dip my pitcher into the original source and catch the bubbles as they rise to the surface. Before doing this, however, let us take a brief survey of matters connected with the mineral waters of France in general.

There is no country in the world where mineral waters are held in higher estimation than in France. This is shown by the fact, that the preservation and management of all the important mineral springs are under the direct control of the government, and form a distinct bureau under the minister of agriculture, commerce, and public works. They are now under the immediate charge of M. Nanta, Chief of the Division of Mines and Manufactories. He is aided by a *Consulting Hygienic Committee* consisting of nine members, of which M. Rayer, Dean of the Faculty of Medicine and Physician in ordinary to the Emperor, is president. Thirteen other physicians of eminence are designated by government to aid in the deliberations and consultations relating to mineral waters; and their names are annually published in connexion with the other officers of State. Besides this, the *Imperial Academy of Medicine* has a permanent standing committee on mineral waters, consisting of six of its most distinguished members, besides a leading chemist. Besides these, there is an *Army Council of Health*

under the minister of war, who have a voice also in regard to the use of mineral waters: of this, M. Vaillant is President and Medical Inspector.

The Government, moreover, to show its faith by its works, has established nine Thermal Military Hospitals, viz. at Vichy; Bourbonne-les-Bains; Bareges; Amelie-les-Bains; Bourbon-l'Archambault; Plombieres; Guano (Corsica); Hamman-Mezkhoutine (Algiers); and Bains de la Reine (Algiers):—To these hospitals, both officers and soldiers, laboring under certain kinds of chronic disease, are sent by the Government until cured, or death has relieved them of their sufferings. Resident medical inspectors and adjunct inspectors are appointed also to all the important mineral springs of France. Besides, there are physicians resident at Paris, whose chief office is to prescribe what mineral waters are best suited to individual cases; these now number forty-seven, besides ten chemists specially devoted to the analysis of these waters. These statements are, perhaps, sufficient to show in what estimation mineral springs are held in France. I may add, however, that in 1861, a prize was offered of one thousand francs for the best work on mineral waters; and the French Academy of Medicine, at a special sitting, awarded it to Dr. Durand-Fardel, whose work is now a leading authority on the subject; nine silver or bronze medals were also awarded to other writers, and honorable mention made of four more. An Annual of mineral waters and marine baths is also published at the commencement of every year, and has a large circulation.

Public opinion, in France, is opposed to factitious and artificial mineral waters, and they, consequently, have but a very limited sale; if, indeed, they are sold at all. The Academy of Medicine has, indeed, on application, expressed an opinion favorable to lemonade impregnated with carbonic acid gas, but at the same time directed, that if made in leaden or copper vessels, the surface should be well guarded by a thick coating of tin. This is the nearest this learned body has ever come, to giving its sanction to artificial mineral waters. The *Society of Hydrology* of Paris met some time ago to deliberate specially on this subject, but I believe came to no positive conclusion. The immense quantities of the natural Vichy water consumed throughout France, as well as of the natural salts prepared from the water, show conclusively the estimate placed upon these natural products over any artificial productions that could be made.

The view taken of this subject by the leading French chemists is far more rational than one might be led to expect. In their view, Chemistry seems to hold the same relation to mineral waters as anatomy does to the human body; it reveals something—not all. They believe that it is essential to study their special action on the living economy. Every mineral water is regarded *as a centre of force*, only when studied and learned by the phenomena manifested under its use, and not by the organic elements simply, that enter into its composition. This is certainly the only rational view, for there may be agents so minute or so combined as to escape the analytic skill of the chemist, but which exert a decided influence over the vital properties. It is therefore impossible ever to form an artificial mineral water identical in composition or effects with that which is imitated. Its demerits and its therapeutical properties may be analogous; they can never be identical. They are not, however, without their use, where the natural waters cannot be had. Nevertheless, it must be admitted, that intelligent persons who resort to mineral springs are mainly guided in their choice by a consideration of the principal elements that enter into their composition; and this is the principal office of physicians who reside at such watering places. They prescribe not simply the water, but the substances it contains; nothing is certainly more important than this knowledge except their physiological action. I certainly cannot say with the celebrated Bergmann, that to know the chemical composition of a mineral water is to anticipate experience; most medical writers on the subject state that, in the treatment of diseases, the virtues of mineral waters bear a direct relation to the known elements entering into their composition; yet, it must be admitted that they often have a contrary effect to what was anticipated, and that the only certain test of what they will effect is actual experience, and ample trial. In short, as Prof. Paine has so conclusively shown, the body is not simply a chemical laboratory, but a living organism whose vital forces contain chemical elements and chemical affinities, but are never, till death, controlled by them.

There are, in all France, one hundred and sixty-five mineral springs of greater or less celebrity; the most important of which, already stated, belong to and are controlled by the Government.

Vichy may undoubtedly be placed at the head of these, if we consider the reputation it enjoys, and the number of invalids who annually resort hither to make trial of its waters. The Emperor may be said to have taken it under his especial patronage, as the Empress has that of *Eaux-Bonnes*, for he occasionally takes up his residence at Vichy in July, and protracts his stay till late in August, or rather, till the great national fête of the 16th of the mouth. It is well known that he has been somewhat of an invalid for several years past, and it is generally believed that he finds the use of the waters extremely beneficial. Some idea may be formed of the popularity of the waters, when I state, that up to the 15th of September, 1861, 16,440 strangers had visited the place, and up to the 20th of August of the present year, 15,483 patients had registered their names, besides 1324 servants who accompanied them. These, as the register shows, came from every country in Europe, and a considerable number from North and South America, and the West Indies. There can be no doubt that some fashionables are attracted hither by the presence of the Emperor, but the vast majority to try the medicinal effects of the waters.

There is nothing attractive in the appearance or situation of Vichy; it is a hot, dusty place, far more so than our Saratoga, while its surroundings are far less agreeable. It consists of the old and new town; the streets of the former narrow and irregular, while the houses are mean and ugly, but the new portion is better laid out, though still without much order or regularity, the houses being built of the same light-colored sandstone which is universally used all over France. It lies on the left bank of the Allier, a moderate-sized river, in summer occupying a tenth part of its ordinary channel; nine hours by express train from Paris on the Orleans line of railway.—There are numerous *grand* hotels; everything is grand in France; even the principal spring here goes under the name of *Grande-Grille!* The price of board, including rooms and the use of the salon, is from one to three dollars or more per day, according to extent of accommodations. A patient, however, as at our own watering-places, can adapt his expenses to his means. All the hotels have a *table d'hôte*, but the patient can resort to a restaurant, and thus live at less than half the expense. There are some establishments chiefly patronized by the fashionable, who resort hither for gambling or amusement, such as the hotels Guillermin, de Paris, Germot, &c. Lodgings generally have to be secured in advance; one-half the residents seem to be in the confectionery line, for their shops are filled with pastilles and sugar plums, made of Vichy salts, sugar, and flour, or gum and "*sucre d'orge*," a "digestif alcalin," very much in vogue.

The springs, nine in number, were first taken possession of by Napoleon I. in 1810, who opened a park, and authorized the acquisition of the necessary land. The large establishment was erected in 1820, but it was not till 1845 that the government took entire control of the waters. The second thermal building was erected in 1853. These are large and commodious, and display considerable architectural taste. These are 306 bath rooms, and 39 separate rooms for *douche* baths, which seem to be greatly in vogue. In 1853 the government sold 100,520 bath tickets, and sent

out 361,000 bottles of the water. In 1857, 170,405 tickets were given out, including 27,000 gratuitous, and 700,000 bottles of water sold; in 1861, 280,000 bath tickets sold, and 1,250,000 bottles of water sent out and sold, and all this in addition to the immense quantity of the dry salts, extracted from the waters, and the *pastilles*, made for the government from the same salts, and distributed over the kingdom. Thus it will appear that these mineral waters are a source of no small revenue to the government, and are annually becoming more and more profitable. The presence of the Emperor and the increasing pecuniary value of the waters has given quite a spur to improvements recently; manifested by the formation of a new park and ornamental grounds on the banks of the Allier, the construction of a new suspension bridge, the exterior of the railroad from St. Germain des Trosses to Vichy, and the erection of many handsome seats and villas in the neighborhood. I visited the large establishment for extraction of the natural salts, which is in charge of a special agent appointed by government, and every precaution is taken to prevent fraud by adulteration or substitution, and the same of the water sent out in bottles. So extensive is this distribution, that there is scarcely any part of the world where the natural Vichy water, or its salts, cannot be had.

The remedial properties must be reserved for my next letter.

Army Medical Intelligence.

REPORT OF THE SEVENTY-FIFTH REGIMENT N. Y. S. VOLUNTEERS.

CAMP ARNOLD, PENSACOLA, FLORIDA,
August 1st, 1862.

S. OAKLEY VANDERPOEL, M. D.,
Surgeon-General, S. N. Y.

DEAR SIR:—I transmit herewith an abstract of the report of sick and wounded of this command, for the month ending July 31st, 1862. The health of the regiment is as good as at any time since it has been in the service. The diseases were principally remittent fever, diarrhœa, and dysentery, of mild type, and readily amenable to simple treatment. There are no indications of any form of malignant fever, and as the season is so far advanced, we hope to escape all trouble in that direction.

We are a little afflicted with *nostalgia*, owing principally to the length of time intervening between the reception of mails from the North, and the lack of more active service to break the monotony of camp life.

I have the honor to remain, very respectfully,
Your obedient servant,
M. D. BENEDICT,
Surgeon 75th N. Y. Vols.

Abstract of report of the sick and wounded of the 75th regiment N. Y. Vols., for the month ending July 31st, 1862:—Remaining at last report, sick, 30; convalescent, 7; taken sick during the month, 148=185. Returned to duty, 147; on furlough, 3; died, 1; remaining sick, 20; convalescent, 14=185.

The fatal case was that of a new recruit of company K, who had been here but a short time; and the disease causing death was produced by very gross imprudence in diet.

Abstract of report of sick and wounded of the 75th regiment N. Y. Vols., for the month of June, 1862, at Camp Arnold, Pensacola, Florida:—Remaining at last report sick, 17; convalescent, 4; taken sick during the month, 92 =113. Returned to duty, 73; discharged, 3; remaining sick, 30; convalescent, 7=113.

For the quarter ending June 30th, 1862:—Remaining at last report, sick, 47; convalescent, 4; taken sick during the quarter, 265=316. Returned to duty, 273; discharged, 4; died, 2; remaining sick, 30; convalescent, 7=316. Accidentally drowned while bathing in the surf, 1.

M. D. BENEDICT, *Surgeon, &c.*

Medical News.

AMERICAN PHARMACEUTICAL ASSOCIATION.—The tenth meeting of this association, which adjourned in 1860, in New York, to meet in St. Louis in the following year, was postponed on account of the disturbed state of the country, and, at the suggestion of the Executive Committee and the consent of many members, was invited to meet in the city of Philadelphia at the present time. It accordingly met on the 27th ult. Although, as was to be expected under the circumstances, the attendance of members at large was smaller than usual, the standing officers and committees were fully represented, as were the several Colleges of the Atlantic cities by their delegates. At the close of the third day the Association adjourned to meet again in September next, at the call of the President.—*Bost. Jour.*

The "slip between the cup and the lip" was never more painfully exemplified than in the case of ovariotomy detailed three weeks ago to his *confrères* of the Academy of Medicine of Paris, by M. Nèlaton. On Tuesday last this surgeon again mounted the tribune to announce the death of his patient, which occurred on the twenty-first day after the operation, from tetanus. The *Gazette Hebdomadaire*, in commenting upon this singular unhappy termination of what promised to be a brilliant success, winds up with the verdict of "*died cured*," and very properly protests against such a complication as tetanus figuring in the list of *contras*, when the expediency of the operation is called in question.—*Lancet.*

AN AGUE CHARM.—The accompanying charm is so unique, and, I am assured, so immensely potent, that I cannot forbear giving it to suffering humanity through the columns of your Journal. It was given to a friend of mine by a laboring man, who professed to have cured thousands with it. It was in a sealed paper, and was directed "to be worn in the bosom." My friend sacrilegiously broke the seal, and unfortunately the spell at the same time, for it did not cure his ague. The following is a literal copy:—

"Wen Jeasus saw the plais wair he was to be crusey feyed he trembeled then sais the jues hunto him hath though hand hay gue Jeasus saith hunto them hif hainey man ceap these woord he shal never be a trubeled with hay gues nor feavers sow then help this thy survent that puts is trust in the."—*Brit. Jour.*

INFLUENCE OF OZONE.—Dr. Ireland remarks, on the influence of ozone on the health of patients in the hospital of Umballa, Bengal, that on one occasion, when the quantity of ozone showed a marked increase, all the patients recovered; on the contrary, a sudden decrease of ozone was followed by a threefold increase in the number of patients, and the prevalence of rheumatism and influenza.—*Lancet.*

AFFECTIONS OF THE THROAT IN SCOTLAND.—Sore-throat, ulcerated sore-throat, and diphtheria, have occurred in various localities in Scotland, and in Mid and South Yell. The sore-throat appears to have been accompanied with an affection of the hands, which raises the suspicion that sore-throat and diphtheria in the human subject is but a variety of the epidemic disease in cattle known by the name of murrain or epizootic aphtha, characterized by the aphthous and ulcerated mouth and sore hoofs.—*Lancet.*

MEDICAL HONORS.—M. Claude Bernard, Professor of Medicine at the Imperial College of France, and Professor of General Physiology at the Faculty of Sciences of Paris, has been promoted to the rank of Officer of the Legion of Honor.

Original Lectures.

LECTURES

ON THE

DIAGNOSIS OF DISEASES OF THE HEART.

DELIVERED AT THE

BELLEVUE HOSPITAL MEDICAL COLLEGE DURING THE PRELIMINARY TERM.

SESSION 1862–63.

By AUSTIN FLINT, M.D.

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE I.

Preliminary Remarks.—Arrangement of Diseases of the Heart in Three Divisions, viz. Structural, Inflammatory, and Functional.—Exhibition of the Heart and its Topographical Relations in the Cadaver.—Delineation of the Boundaries of the Superficial and Deep Cardiac Spaces, by Means of Percussion, on the Healthy Chest.—Effects of Enlargement of the Heart on the Situation of the Apex-Beat.—Increased Area of the Superficial Cardiac Space, and Extension of the Lateral Boundaries of the Deep Cardiac Space as Evidence of Enlargement.—The Application of Physical Exploration to Determine the Existence and Amount of Enlargement, Illustrated by two Cases.

Gentlemen:—During the preliminary term of the last session, I delivered a short series of lectures on Physical Exploration as applied to the diagnosis of diseases of the lungs. I propose, during the preliminary term of the present session, to devote the lectures assigned to me to a kindred subject, viz. the diagnosis of diseases of the heart. It is an interesting fact, that most of our present knowledge of this subject has been developed within a late period. Up to a quarter of a century ago, little was known of diseases of the heart, especially as regards their discrimination during life; they were recognised only when they were so far advanced that the evidence of their existence had become very palpable. At the present moment, perhaps, in no department of practical medicine is our knowledge more complete and satisfactory. It would be pleasant, by way of an introducion to the consideration of the subject, to give a historical sketch of the researches by means of which the subject has been elucidated during the last quarter of a century; but I could not do this without occupying time which may be more profitably spent with matters of greater practical importance, and I must, therefore, forego that pleasure.

I shall not detain you with any extended introductory remarks on the claims which the subject has on your attention. I am sure you will be properly impressed with its importance in the course of the clinical studies which we are to pursue together during the session. Suffice it to say, that in almost every case of illness which will hereafter come under your cognizance as practitioners of medicine, it is desirable to determine whether the heart be diseased or healthy; and the existence or non-existence of disease of this organ is to be taken into account in the management of the majority of cases. If the heart be diseased, the fact should be ascertained; if not diseased, the fact should be known; and it will often happen that the fact of the existence of disease, on the one hand, or the fact of the non-existence of disease, on the other hand, is by no means important merely as a matter of diagnosis, nor with reference only to the prognosis, but as bearing on the employment of therapeutical and hygienic measures.

In treating of the diagnosis of pulmonary diseases, during the last session, I was obliged to limit myself to physical signs, owing to the extent of the subject. The diagnosis of diseases of the heart is a less extensive subject; it lies within comparatively a small compass; and I shall probably be able, in the short series of lectures accorded to me, to consider diagnostic symptoms as well as physical signs.

With regard to the diagnosis of cardiac as well as pulmonary diseases, if we compare signs and symptoms with reference to their relative value, we must consider the former as vastly more important. The signs are more precise, more reliable, and more available than symptoms. But neither should receive exclusive attention; the signs and symptoms should always be associated. In this way the proof of the correctness of the diagnosis is strengthened, and we avoid errors which are unavoidable if either symptoms or signs are exclusively relied upon.*

In treating of the diseases of the heart, I shall consider these diseases as divided into three classes. *First*, Affections involving appreciable changes of structure, or in other words, lesions. We may distinguish these diseases as structural affections. *Second*, Diseases consisting of inflammation seated in any of the structures which enter into the composition of the organ; or, inflammatory affections. *Third*, Diseases attended with no appreciable changes, or functional affections. I shall begin with the diagnosis of structural affections. And, of these, the first to which I shall ask your attention is enlargement of the heart. How do we determine whether the heart be or be not enlarged? This is the first question in diagnosis which I propose to consider. We shall see hereafter, when we treat of the pathology of diseases of the heart, that this is a highly important question. We shall see that, in the cases in which other structural affections exist, the gravity and danger depend chiefly on the coexistence of enlargement of the heart. Now, as the basis of the means by which the fact of enlargement, or otherwise, is to be obtained, we are to take into account certain points relating to the anatomical situation and relations of the heart in health. It is not my province to lecture, at length, on the anatomy of the heart, I must presume that you are already familiar with the structure of the organ; if not, the facilities are at hand, in this college, for becoming so. I shall only bring before you some points relating especially to the topographical relations of the heart, which must be clearly before the mind's eye in order to understand the means of determining its size in the living body. In order to make these points as clear as possible, let us inspect the heart as it is exhibited on opening the chest of a cadaver in which the thoracic organs are free from disease.

On the table before me, is a dead body, with the sternum removed, by a division of the costal cartilages at their junction with the ribs. You have now presented an anterior view of the thoracic organs. You see a portion of the lungs, and a portion of the heart concealed by the pericardium which has been allowed to remain intact. The lungs, you are to bear in mind, have not the volume which they had before the chest was opened. Removing the sternum has exposed them to atmospheric pressure, and they have in a measure collapsed. I have caused the nozzle of a pair of bellows to be inserted into the trachea, and I am thus able to inflate the lungs. I do this moderately, so as to produce about the amount of expansion which the lungs would have had the chest not been opened. Let me now call your attention to the situation of the heart and its relations to the right and left lung. You perceive that the anterior margin of the right lung extends to the middle of the chest, or the median line. But you perceive this is not true of the left lung. At a certain point, viz. a point corresponding to the junction of the fourth costal cartilage with the sternum, the left lung separates from its fellow, leaving a triangular space within which the pericardium is uncovered by lung, and in immediate contact with the thoracic walls. Observe this triangular space. I shall refer to it frequently in treating of the diagnosis of diseases of the heart. It is called the *Superficial cardiac space;* called superficial, because it is situated superficially as regards the lungs and thoracic walls.

* The terms *symptoms* and *signs* are here used with the conventional sense now attached to each, viz. the term signs being limited to the phenomena obtained by the physical methods of examination, auscultation, percussion, etc., and the term symptoms applied to all other phenomena of disease. This use of these terms, although not correct, is convenient.

Mark the boundaries of this superficial cardiac space. The upper boundary is situated on the median line on a level with the fourth costal cartilage; the anterior margin of the left lung, and the anterior margin of the right lung form, respectively, the right and left boundary, and below it is bounded by the stomach and the left lobe of the liver with the diaphragm intervening. You perceive that this space approximates to the figure of a right-angled triangle. The receding margin of the left lung forms the hypothenuse of the triangle, while the lower and right boundaries form the two sides of the right angle. The area of this space depends, of course, on the degree of expansion of the lungs. If I inflate the lungs, as I will do by means of the bellows attached to the trachea, to their fullest capacity, you see that the space is considerably diminished. This occurs, in the living body, when the lungs are expanded by deep inspiration; and it occurs, as I shall illustrate hereafter, when the lungs are permanently expanded in the disease called pulmonary emphysema. That portion of the anterior surface of the heart and pericardial sac which is covered by lung, is distinguished as the *deep cardiac space*. Observe that this space on the left side extends to about the situation of the nipple, and on the right side, from half an inch to an inch beyond the right margin of the sternum. The limits, on the right and left side, of the deep cardiac space, correspond to the situations of the right and left borders of the heart. These are points pertaining to the topographical relations of the heart which are to be recollected. I shall refer to them again, presently, in directing your attention to the living body.

I now open the pericardial sac and expose the heart itself to view. With its form, component parts, etc., I suppose you to be familiar. I wish only to direct your attention to its situation. The relations of its lateral borders have just been indicated. Vertically, it extends from the third to the sixth ribs. Its direction, as you see, is oblique. The point or apex corresponds to the fifth intercostal space, and its situation in relation to the *linea mammalis*, or a vertical line passing through the left nipple, on the one hand, and the median line on the other hand, is to be recollected. It is situated about an inch within the linea mammalis, and about three inches to the left of the median line.

There are a few remaining anatomical points, which I will ask you to observe. One point is, the smooth, polished appearance of the serous membrane, which lines the fibrous sac containing the heart, and invests the surface of the organ. I shall have occasion to refer to this in treating of pericarditis. Another point is, the attachment of the pericardial sac, not at the base of the heart, but to the large vessels two or more inches above the heart's base. Observe, the pericardial sac is wider at the lower than at the upper part. When spread out or distended, it occupies a pyramidal space, the base of which is below and the apex above, while the space occupied by the heart itself forms a triangle of which the base is above and the apex below. Observe, the heart is fixed only at the base, by means of the connexions of the vessels emerging from it, while the body and apex are free and movable. Observe, also, the two large arteries which spring from the base of the heart, viz. the pulmonic and the aorta. The relative situation of these is of importance with reference to certain physical signs. You see the pulmonic artery on the left side rising to the second rib, and the aorta on the other side rising nearly to the first rib in joining its arch.

These, gentlemen, are all the points relating to the topographical relations of the heart which I wish to bring before you preparatory to considering the diagnosis of enlargement, and, if you will now go with me to the hospital amphitheatre, we will leave the cadaver and direct our attention to the living body.

Recurring to the question, "How do we determine whether the heart be or be not enlarged?" I answer, we do it by means of physical signs. We employ physical exploration with reference to this affection, as in its application to all the diseases of the lungs and heart, for either a positive or a negative end. The positive end is the discovery of signs denoting the existence of the affection; the negative end consists in finding the phenomena of health, and therefore excluding the affection. Now, physical exploration enables us to determine during life that the situation of the heart, the space which it occupies, and its relations to the surrounding parts, are the same which we have just shown to exist in the body after death. We determine this chiefly by percussion, but auscultation may also be employed; the former is sufficient for all practical purposes. How do we employ percussion to determine the situation, size, and relations of the heart in health? In proceeding to answer this question, I shall introduce a person, supposed to be free from any thoracic disease, with the chest exposed.

When percussion is made on the chest of a healthy person, a sound is produced, which is known as the normal vesicular resonance. It is very important for you to become practically acquainted with the characters of this resonance, but the consideration of it pertains to the application of percussion to the pulmonary organs. I give you an example of this resonance as I now strike with my percussor the chest of the person before you. If I employ percussion over the portion of the chest which corresponds to the space occupied by the heart, known as the præcordia, the presence of this organ affects the resonance; it is diminished in degree, in other words there is dulness; it is altered in other respects, but it is sufficient to say that there is dulness. By means of this dulness, it is easy to determine and delineate on the chest the *superficial cardiac space* which you have just seen exhibited in the cadaver with the sternum removed. Commencing in the centre of the præcordia, as I now percuss, you perceive, at once, the dulness; it is well marked. I percuss lightly from the centre in every direction, and you perceive that this marked dulness is confined within certain limits. Let me ascertain those limits, and mark them with ink on the chest. Having done so, you see I have produced by my lines in ink a right-angled triangle. This figure incloses the *superficial cardiac space*. Observe its situation: the oblique line, or hypothenuse, extends from the middle of the sternum on a level with the cartilage of the fourth rib, to a point in the fifth intercostal space, about an inch within the *linea mammalis*, and at the latter point you perceive the beating of the heart. The sides of the right angle consist of a vertical line in the centre of the sternum, and a horizontal line corresponding to the lower boundary of the heart. This space is generally so easily determined, that the merest tyro in percussion is competent to delineate it.

Let us now see whether percussion will enable me to determine the boundaries of the *deep cardiac space*, or, in other words, the boundaries of the space which the whole of the heart occupies. Percussing from above downwards, and striking with more force than before, when I come to the third rib over and close to the sternum on either side, a change in the percussion sound is appreciable; dulness is apparent, although less marked than within the superficial cardiac space. This dulness over the third rib denotes the situation of the base of the heart. Next, I percuss from the left lateral surface of the chest towards the median line, and now as I have advanced a little within the nipple you perceive a change in the percussion-sound; there is slight dulness. This denotes the situation of the left border of the heart. Next, percussing from the right nipple towards the median line, at a point near the right border of the sternum, about half an inch from it, a similar change, or dulness, is observed. This denotes the situation of the right border of the heart. These points connected with the boundaries of the heart are all that are practically important; and we are now prepared to consider the application of percussion to determine the existence of enlargement of the heart.

When the heart becomes enlarged, the base of the organ being fixed, the situation of the latter is but little altered;

it may be unaffected, or raised a little above the third rib. The body and apex being free, the increased space which the heart occupies, consists chiefly in an extension downwards and laterally; and the lateral extension is more marked on the left than on the right side of the sternum. The enlargement is evidenced in the first place, by the altered situation of the point where the apex-beat of the heart is seen or felt; and here we call into use the methods of exploration called inspection and palpation. We seek for the apex-beat by the eye and touch, and, if the enlargement be but moderate, we shall find it simply carried to the left of its normal situation. We have seen that in health it is situated in the fifth intercostal space, about an inch within the *linea mammalis*, or three inches to the left of the median line. This situation varies somewhat within the limits of health, and occasionally we find it in the fourth, instead of the fifth, intercostal space. It is not unfrequently found in the fourth if the person examined lie on the back. A moderate degree of enlargement of the heart removes the apex-beat to the linea mammalis or somewhat without this line. If the enlargement be considerable or great, the apex-beat is removed still further to the left, and also more or less below the fifth intercostal space. It may be seen or felt, one, two, three, or even four inches beyond the line of the nipple, and it may be lowered to the sixth, seventh, or eighth intercostal space, the extent of deviation from its normal situation in both directions being proportionate, other things being equal, to the amount of enlargement. Attention to the situation of the apex-beat is, thus, one of the means of determining the existence and the extent of enlargement of the heart.

Another effect of enlargement of the heart is an increase of that area in which the organ is uncovered by lung, called the *superficial cardiac space*. The heart, in proportion as its volume becomes augmented, pushes away the anterior border of the left lung, and a larger portion of the pericardial sac is in immediate contact with the walls of the chest. The extent to which the superficial cardiac space becomes enlarged, is proportionate to the amount of the enlargement of the heart, and the former becomes an index of the latter. We have seen that the superficial cardiac space is easily determined by percussion, in health, and it is still more easily determined when the heart is enlarged; for, in proportion as the organ is uncovered by lung, the degree of dulness, as well as the extent of area, becomes greater. Having then ascertained the situation of the apex-beat, we next determine the area of the superficial cardiac space; and, for this end, it suffices to fix the situation of the oblique line, or the hypothenuse of the right-angled triangle which represents this space. We fix this line in a few moments, by percussion, and then complete the triangle. If the enlargement of the heart be considerable or great, we shall find this space increased to two, three, four, or even five times the area of health.

Lastly, we may determine the lateral boundaries of the heart; in other words, the width of the deep cardiac space. We do this precisely in the same way as in the examination of the healthy chest. We shall find the alteration in the percussion sound, or the dulness, on the left side, situated beyond the nipple half an inch, an inch, two or more inches, in proportion to the amount of cardiac enlargement. We must bear in mind here, the range of healthy variations. Generally, in health, the left border of the heart falls a little within the nipple, but in some persons it extends to the nipple, and sometimes a little distance beyond the nipple. If the border of the heart be a half inch beyond the nipple, there exists enlargement, certainly in the great majority of cases; and if it be one, two, or more inches without the nipple, the enlargement is considerable or great. On the right side of the sternum, the right border of the heart may be found to be more or less carried outward; but in the majority of cases, whether the cardiac enlargement be seated chiefly in the right or left ventricle, the lateral extension of the space which the heart occupies is especially on the left side of the sternum, and it suffices for ordinary practical purposes to determine the situation of the left border of the organ.

Having prepared ourselves with a clear apprehension of the points pertaining to the topographical relations of the heart, to which your attention has been directed in the early part of this lecture; having practised the application of percussion to determine the boundaries of the superficial cardiac space and of the deep cardiac space in health; recollecting the relations of these boundaries to the ribs, the linea mammalis and the median line, and bearing in mind the normal situation of the apex-beat of the heart, nothing can be more simple and easy than to determine, by the means just stated, whether the heart be or be not enlarged, and also to determine with sufficient precision for all practical purposes, the amount of enlargement. In conclusion, gentlemen, I shall introduce two patients affected with enlargement of the heart, and illustrate the application of physical exploration so far as concerns the existence of this affection in these cases,

Divesting the chest of one of these patients of clothing, we direct our attention, first, to the situation of the apex-beat, and it is easily seen and felt, and is situated, as you see, in the sixth intercostal space, about two inches without the linea mammalis, or three inches to the left of its normal position. We have, then, this evidence of a considerable amount of enlargement. Next, I will ascertain by percussion the area of the superficial cardiac space. I percuss from the point of the apex-beat in the direction obliquely upwards and to the right, and, as you see, it is easy enough to appreciate the line representing the limit of dulness. I mark this line with ink. You observe that at the median line it ends at a point where the upper part of the superficial cardiac space in health extends quite to the base of the heart, showing that the organ is uncovered of lung quite to its base. I now complete the triangle. And now I place, side by side, this patient and the person on whose chest the superficial cardiac space as it exists in health was delineated. You perceive that in the patient affected with enlargement of the heart, this space is at least four times as large as in the person with a healthy heart I employ percussion to fix the situation of the left border of the heart. The change in the percussion sound enables me to do this readily, and I indicate the situation by an ink line. You see it falls at least two inches without, or to the left of the nipple. On the right side I determine the right border of the heart, and you see it falls about an inch without the right margin of the sternum. We have thus obtained, in a few moments, the evidence afforded by percussion, of considerable enlargement in this case, corroborating the evidence relating to the apex-beat which we previously obtained by inspection and palpation.

With regard to determining the area of the superficial cardiac space, I will here remark, that auscultation, as well as percussion, is available for this purpose. You are aware that in listening to the chest when a person speaks, a reverberation of the voice is communicated to the ear, called the *normal vocal resonance*. I cannot stop to describe this healthy sign, I shall do so in connexion with the consideration of the pulmonary signs. In persons who have naturally a well marked vocal resonance in health on the left side of the chest, the abrupt cessation or noticeable diminution of this resonance serves to denote the boundaries of the superficial cardiac space, both in health and in cases of enlargement of the heart. We may, in this way, corroborate the evidence of an increase of this space, obtained by percussion; but percussion alone is sufficiently conclusive, so that the additional evidence afforded by auscultation is hardly required. Auscultation of the respiration does not afford the same information as the voice, for the respiratory murmur is transmitted to some extent beyond the margins of the lungs, while the vocal resonance either ceases or is naturally diminished at the line to which the lung extends.

I now present the second patient with the chest exposed. In this case, the apex-beat is not so plainly seen or felt as

in the other patient, but it is appreciable, and I indicate its situation by a cross in ink. You perceive it is situated nearly two inches without the left nipple, and in the sixth intercostal space. In the same manner I delineate the superficial cardiac space, and you see it is at least three times greater than in the person with the healthy chest. I fix the left border of the heart, and it falls nearly two inches to the left of the nipple. The right border of the heart falls a little further without the right margin of the sternum, than in health.

I must defer until my next lecture, the consideration of other points connected with the subject of enlargement of the heart.

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from* p. 143.)

I HAVE before me a tabular view of the condition of the urine of one hundred persons suffering from Bright's disease in its various forms seen in private practice. In looking over the list, I am able to testify to the habits of the patients from personal acquaintance in twenty-nine of the cases. Of these, twenty-six were strictly temperate in the use of alcoholic drinks, and many of them were absolutely abstinent. Only three were addicted to excess in the use of them. There is then a large number of cases in which Bright's disease is not secondary, nor can it be ascribed to use of alcoholic drinks, to recognisable errors of diet, or to any unusual exposure to cold. In other words, there are many cases, the cause or causes of which are unknown. Here, it seems to me, is for the present our field of study. As I have said, our knowledge of symptoms and of lesions far exceeds that of causes, and taught by the history of the kidney affection induced by scarlet fever and pregnancy, we are able to assert that the incurableness of the disease does not depend on disorganization of the kidneys even mainly, for this, within certain limits, we see recovered from, but upon our inability to appreciate and remove the cause, till the system is fatally poisoned.

I propose now to describe the pathological anatomy of Bright's disease a little more fully and connectedly than I have yet done. I have already said that, as I understand it, there are really but two leading distinctions—the large kidney, often white or whitish, and the contracted kidney, sometimes hobnail, and that even this distinction does not imply cardinal differences in the diseased action. This statement will, I think, be very apparent when we come to study the organs by the aid of the microscope. To get definitely before the mind the different appearances in the two principal forms, I call attention again to these colored drawings, which are portraits of the kidneys which are described in the manuscript so often referred to. In this large kidney which weighed twelve ounces, the surface is smooth and uniform. The color hardly differs at all from that of the bloodless skin of the cadaver, except where the vessels are unusually abundant. The vascularity is entirely unnatural. We no longer see that fine reticulation of the capillaries which maps out the little lobules no larger than a pin's head, on the surface of a healthy kidney when it is full of blood, or in one that has been successfully injected, but the vessels have arranged themselves in new forms. There are clusters of vessels assuming a stellate apparance, or they are arborescent. There are from thirty to fifty of these clusters in this specimen almost wholly stellate, on each half of the kidney, some well marked, others imperfectly formed. The capsule is represented as turned down towards the pelvis and held off by hooks, to show that it had not quite its natural transparency, and that it was sufficiently adherent to tear off with it some of the vessels of the surface. These the artist has painted as fragmentary and irregular.

This second figure on the same sheet, shows the appearance of the interior of the organ when bisected in the direction of its length. It is of a dull yellowish white color, not variegated or mottled, as diseased kidneys often are, but quite uniform, except in the parts occupied by the pyramids or tubular portions. These pyramids have undergone an important change. No one of them has the definite outline or boundary that belongs to them in health. They are partially obliterated, and the thinned relics straggle about variously in the cortical or secreting structure, terminating in rays which fade away in the surrounding tissues. The borders of the pyramids do not approach nearer to the surface of the organ than usual; on the contrary, the cortical portion seems to be rather thicker than usual, or, in other words, it seems to have partaken of the general hypertrophy. The vascularity of this section is hardly to be seen. With the exception of a few red lines in the remains of the tubular portion, and some short thick ones which penetrate from the surface a small fraction of an inch towards the pelvis, scarcely a vessel is visible.

Here is another sheet on which are painted two views, the exterior and interior of another large white kidney. This resembles the one first described in its main features. The color is not so dull. The yellow tint is a little more marked and a little brighter; still, where the vascularity is not considerable, it has the same cadaveric color. The vessels are much more abundant on the external surface and on the external border of the section. But there is a marked difference in the arrangement of the vessels on the surface. There are half a dozen spots where there is a little clustering, but there is nothing of the stellate or of the arborescent appearance. The surface is covered with red dots, and little veins a line or two in length, having mostly a zigzag course, their ends so buried in the tissue that they appear to begin in nothing and to end in nothing. Here and there some incomplete remains of the natural network can be traced. The tubular portions are of a brighter color than in the other specimen, because they contain, as the whole organ does, more blood; still their proportions seem to be dwarfed, probably on account of the hypertrophy of the other parts, and their outer borders are diffused and fade away in the cortical portion just as they are seen to do in the other figures.

Here again, a third sheet gives us the exterior and interior of another kidney that is enlarged, though only moderately. Its weight was about seven and a half ounces. It is evidently the seat of the same variety of disease that we have seen in the other figures, but the appearances are in some respects quite different. The vascularity, like that of the last, is only beginning to undergo the change which was so marked in the drawing first shown. The vessels show themselves on the surface in short irregular lines, and even where most congested (for in two or three spots it is even ecchymotic) there are no traceable remains of the normal network. At several different points three to five little vessels radiate a line or so from a common centre, indicating the tendency to the stellate arrangement. The vessels of the section are only indistinctly visible, and do not seem to have undergone any characteristic change. But the appearance which distinguishes this kidney from the others is a mottled condition, produced by an infinite number of distinct grey or yellowish grey miliary grains, not unlike small tubercles, visible upon the surface, but more conspicuous on the section. These opaque grains appear to be set in a bluish or olive grey, half translucent, watery tissue, which constitutes the substance of the kidney, and are of irregular shape, though most of them are more or less rounded. The nature of these grains will be referred to hereafter. For the present, it is sufficient

to say, that each of them represents a condition, which, when it becomes general, constitutes the uniform dull opaque grey or yellowish white, which is so marked in the two very large kidneys already described. Three other things are noticeable in this kidney. The pyramids are not spread out and diffused at their borders by the infiltration of adventitious matter as in other specimens, but have their usual compact appearance, and their definite outline. They preserve their dark red color, and contrast very strikingly with the mottled yellowish grey of the secreting portion, everywhere. Second: Though the whole kidney is larger than natural, there is a marked reduction in the thickness of its cortical layer, so that the borders of some of the pyramids almost touch the external surface of the organ. The thickness of the layer outside the pyramids is at one spot less than a line, and its greatest depth is no more than two and a half lines, while in health it should be from three to five lines. This appearance, a very common one in the small and medium sized kidneys, is not very uncommon in those moderately enlarged, and is one of the accidents of the fibrous degeneration. When I come to sum up the evidence in support of the proposition that "the different states of the organ represent modifications in the diseased action," and not different diseases, I shall desire that this drawing be well remembered, showing as it does that the large white kidney (for this is demonstrably of that class, though the changes are not yet complete), has also the distinctive mark of the fibrous disease. Third: It should be noticed that the lining membrane of the pelvis of the kidney is nearly opaque, instead of being semi-transparent, as it is in the healthy organ. This condition belongs to the pelvic membrane of the specimen last described, and the vessels are unusually distinct upon it, but nothing of the kind can be seen in the first. This fact will also be called up again hereafter.

Here is a fourth sheet, showing also the external and internal appearance of a kidney gravely diseased. It will be seen that in its leading characteristics it is almost a copy of the last. It contains more blood, but its vessels have the same distribution, appearing as points, or short irregular lines, or sometimes here and there forming little v's or n's, and, in a very few instances, still showing a single mesh of the natural network. It is dotted or mottled all over on the external surface with the same light grey or whitish spots, so conspicuous in the last specimen; but its section is almost as white as the paper on which it is painted, except the red spots left by the injected vessels, the whitish spots being no longer visible. The pyramids are compact and definite in their form, and nowhere leave more than a line of space between their borders and the external surface for the cortical layer, while one of them actually leaves no appreciable space, but seems to touch the surface. The pelvic membrane is white and opaque on its inner aspect, and quite vascular in its outer. But *this kidney is diminished in size, weighing less than four ounces, the contraction being chiefly in the inferior half*, so that the organ has something of a pear shape. The portion above the centre of the pelvis is at least twice as large as the portion below that line. Here then is a kidney in which the white degeneration and the fibrous contraction are both most singularly manifest. It is a rare specimen, but none the less instructive on that account.

On this fifth sheet is a similar figure, that exhibits an additional point of interest. The kidney, as will be seen, is not much above the natural size. It is a white kidney. The vessels have the same appearance as in that last described, except that one stellated group has been formed, and the beginnings of several more can be seen. The exterior is well dotted over with the opaque greyish-white grains, while the body of the organ is white. But the striking feature is the occurrence in this white kidney of serous cysts, varying in dimensions from the size of a very small shot to that of a large pea. These cysts belong not to the large white, but to the contracted or fibrous kidney. Here then again the lesions of the two forms are instructively blended.

On this sixth sheet are the views of a kidney not far from the natural size, perhaps a little larger, which has become pretty uniformly of a yellowish white in the interior, except as the color is changed by a considerable degree of congestion. The pyramids, by their expanded borders, extend almost to the external surface, and towards their apices they are pale. The organ, like that on sheet No. 4, is markedly contracted at one of its extremities. Scattered over the section can be seen a few small serous cysts, and on the external surface a few white or greyish white grains which have not yet blended. In these respects it resembles specimens already shown. Its striking feature is its vascularity. It is sufficiently injected with blood to leave every vessel visible that is large enough to be seen by the naked eye. The capillaries form thousands of minute meshes over the whole surface, each embracing a minute portion of the structure called a lobule. I engaged the artist to lay in every visible vessel, and he has done it with great labor and extraordinary faithfulness. Here then we have again the mixed lesions, some of them considerably advanced, while the vascular system of the organ has undergone no change, but the accidental one of congestion, which renders every vessel distinct to the eye in its proper place.

This seventh figure represents the kidney of a person who died six weeks after showing the first signs of illness. He had œdema, smoky and albuminous urine, and casts. The kidney is of normal size. The section is of a yellowish red color. But an inspection of the exterior, or of the cut surface, can hardly discover anything unnatural. The interior halves of the pyramids, however, are pale, and approaching the apices they are almost white. The cortical portion is of natural thickness, and altogether it would pass for a healthy kidney. But both the fibrous and the granular degenerations have begun in it as the microscopical examination fully shows. I call attention to this specimen for the sake of saying that in a large number of cases in which the kidneys are so diseased as to leave the blood loaded with urea, charge the urine with albumen, and produce most manifest symptoms of Bright's disease, a post-mortem examination discloses nothing to the unassisted eye which can with any confidence be called disease.

In this series of views we are able to study the extreme changes of the large white kidney; to mark the several steps by which that extreme lesion is reached; and, at the same time, to assure ourselves that the conditions necessary to produce this kind of disease do not exclude the conditions, which, acting alone, would produce the contracted kidney. The concurrence of these conditions is frequently met with.

(To be Continued.)

NEGLECTED CASES.

By CHARLES F. TAYLOR, M.D.
OF NEW YORK.

INFANTILE PARALYSIS.

I HAVE chosen the term, "neglected cases," in order to express, and if possible to impress a fact. No one, I think, is ready to admit that the term is too strong a one who takes the trouble to count the number of persons he will meet with an arm "withered" and useless, or a feeble shortened leg, which is lengthened out by a cork-sole or iron elongation. These embrace *only one* class of neglected cases, that of *infantile paralysis*. The sum of the information obtained from the books with regard to the *treatment* of these cases is very meagre; and the consequence is, that these individuals during perhaps ten or twenty years, have received very little, if any treatment. Who will undertake to treat a patient with a limb paralysed in childhood, and twenty years after "withered" and nearly useless? And yet, it can be shown that nine-tenths of these cases are capable of great amelioration at almost any stage of the disease; and if taken within the first half dozen years a large proportion may be absolutely cured! Infan-

tile paralysis should be regarded as a distinct disease, requiring an independent classification. It is as distinct from all other forms of paralysis, as the paralysis caused by an apoplectic class is from that caused by syphilitic meningitis. That this distinction may appear in a clearer light, it may be well to look at some of the phenomena attending other forms of paralysis.

It is an interesting and important fact, that the kind or quality of muscular contraction always corresponds with the peculiar state of the nervous centres from which the innervation emanates; one form of diseased condition causing one peculiarity in the action of the muscles, and another form of disease producing another kind of muscular action. That is, the *product* of the functional manifestation of any organ is as the organ itself; and hence reveals more or less distinctly the condition of that organ. This physiological law is perhaps more emphatically true of the brain or spinal cord than of a gland or muscle. And, as we analyse the urine, the *product* of the function of the kidneys, in order to ascertain the nature and extent of the disease affecting these organs; so we may with equal propriety and greater facility analyse the product of innervation, muscular contraction, in order to find out the nature and extent of the disease of the brain or spinal cord. And as we find that the various abnormal products found in the urine bear a close correspondence to certain diseases of the kidneys; so do the various abnormal actions of the muscles as closely relate to the peculiar diseases capable of producing the paralysis with which they are affected.

An individual in the daily habit of *handling* paralysed limbs, soon acquires a delicacy of appreciating kinds and qualities of muscular action and conditions, which alone is almost sufficient for diagnostic purposes. The actual *force* of a muscle, as a means of diagnosis, is of no value whatever; but it is the *kind* of force—the impression left on the resisting hand, which it is important to appreciate.

To illustrate: If there be several springs made of steel, board, rubber, brass, etc., and in form, elliptic, spiral, long, short, etc., but each capable of resisting exactly ten pounds, it is not difficult to see, that while the actual resistance of all these would be the same, viz. ten pounds, each, when bent, would yield to the bevel an impression peculiar to itself, characteristic of its material form. And so does a muscle reveal the quality of the force which causes its action. Of course, we see the same exhibition on a larger scale but in a cruder manner, in the natural movements of the individual. Thus every one is familiar with the peculiar half-swinging, half-jerking walk of an individual, hemiplegic from an apoplectic clot in the brain. After the attack, before repairs of the injured brain substance have progressed to any considerable extent—that is, during a space of time often extending over several months, there seems to be a partial or complete annihilation of nervous, and consequently of muscular force. But after repair has well begun, and the cicatrix begins to contract, we have also contraction of the muscles from irritation; the flexors towards the extremities, generally, overcoming the extensors; causing the ankle to turn outward, the fingers to contract with the hands, the forearm to bend across the stomach, etc. A characteristic of this paralysis is, that each movement takes place after a perceptible interval of effort; and also the muscles relieve the effects of the stimulus thus imparted to them for a considerable time after the effort has ceased; but the muscular contraction itself may be, and generally is, quite strong. Only it does not commence and leave off at the proper moment. After a little trial, the muscles come more and more under the control of the will, and exercise always helps such a patient.

We see another paralytic with an entirely different gait, but equally characteristic. As he walks, the toes drop and "scuff" along the floor: it is a peculiar tread; the knees, instead of being forced far back, so that the posterior ligaments hold them like a hinge, the weight being supported on the ends of the thigh and leg bones with little or no aid from the muscles, as is the case in apoplectic paralysis, are unusually flexed, the weight being supported by the muscles, which, yielding a little as the weight of the body comes on them, give a peculiar motion at each step. An effort of the patient corrects all these symptoms; but it lasts for a moment only, he must wait awhile before the effort can be repeated with equal success. Bend a knee or an elbow and the resistance will be strong to begin with, but the force seems to pass out like water from a bladder pressed in the hands, leaving nothing behind. These are some of the muscular symptoms of softening of the brain, and be they ever so slight I have found them incurable.

Another patient passes along, who walks as though his legs were springs of steel and moved by pulleys. Up and down they go with a sudden jerk, after each strong pull of their owner. The knees incline to knock together; the legs are drawn violently inwards, instead of swinging outwards as in apoplectic paralysis. Indeed, he walks as though he were constantly trying to "walk a crack." The muscles are in an unceasing state of irritation. Contraction is so incessant as to be actually painful. That man has lived too fast. Wine and women have been his ruin. He has had syphilis—perhaps many years ago; but the virus has seized on the spinal cord and produced inflammation of its membranes. Exercise rather increases than diminishes the irritation.

Another form of paralysis has these symptoms: The patient—always a gentleman—in the first stages walks with nothing striking in his gait except a trifling tremulousness, and he looks before he steps; his muscles act well and strongly, obeying the will not tardily but a little too quickly, and he cannot tell where his legs are when a movement is made with his eyes closed; he complains of a singular sensation, or rather *want* of natural sensation in his legs. And it is curious that in these cases the loss of sensation precedes the loss of motion—an exception to the ordinary course in paralysis. It sometimes happens that these cases are annoyed by fugitive, transient, and stinging pains in the affected parts, like electric shocks. This is a paralysis peculiar to business men—I never met it anywhere else—men who for years have had large pecuniary responsibilities on them, ships at sea on long voyages, or business requiring great pecuniary foresightedness. The organs of the nervous system are actually worn out by the constant drain and unending strain to which they have been subjected.

These cases are adduced for illustration, and it is not my purpose to speak of their treatment; but I wish to add a caution the non-observance of which I have seen cause great alarm. Do not advise a man, with the symptoms last enumerated, to "take exercise." He is exhausted already; and *any* exercise, mental or physical, will only add an extra strain to his already overtaxed nervous system. Let him keep very quiet and live well, but, above all, stop business immediately. And let me say further, in passing, that the three last forms of paralysis are never benefited by any kind of exercise. It is cases of the *interruption* of nervous supply, not the *destruction* of it, which show such remarkable improvement from a treatment by exercise. And thus we might keep on through every form of cerebral or spinal affection capable of producing paralysis, and we should find that the manifestation of muscular force must depend entirely on the existence of nervous force, and that the latter is affected by the disease affecting the organ generating it. Why should infantile paralysis—so called—be an exception to this physiological rule? We have infantile apoplexy producing symptoms identical with adult apoplexy. Indeed I have seen several cases of intra-uterine apoplexy, where children were born with hemiplegia. And paralysis arising from inflammation of the brain or spinal cord is frequent in children. In such cases the phenomena are in no wise different from that produced in adults, except, of course, the better chance they have for recovery. It is perhaps unnecessary to state that infancy and youth always favor speedy repair; that all effusions, be they of blood, serum, or fibrine, are readily and rapidly absorbed.

In that form of paralysis now under consideration which occurs most frequently in children of a tender age—there is no evidence whatever, so far as the action of the muscles is concerned, of any organic lesion in the brain or spinal cord. In these cases, if we analyse the product of innervation—muscular action—we find it normal in all things except quantity; the abnormal qualities, so prominent in all other forms of paralysis, being entirely wanting. The innervation is absent or feeble, but not diseased. Must we infer, then, that infantile paralysis exists without a lesion? There seems no escape from this conclusion. Such cases seldom die, and the opportunities for post-mortem examinations are very few indeed. But this very fact—the non-fatal character of the disease—would seem to exclude the fountains of nervous force from probable participation in the disease. But what has caused this great loss of nervous power? This is an interesting physiological question, but one not incapable of satisfactory solution. The history of these cases is nearly identical one with another. The attacks generally occur during the first dentition, or between six months and two years old—but a larger proportion between the ages of eight and fourteen months—and almost invariably in delicate children; not necessarily sickly children, but children of feeble powers of endurance. In the large majority of cases the child has some alimentary disturbance, prolonged till the system has become exhausted. During this period it is discovered that a side or an extremity is paralysed. Most frequently there are few or no unusual symptoms ushering in the attack, and there is nothing to mark the precise period of time when the paralysis took place. Not uncommonly there are convulsions or febrile symptoms, but not sufficiently often or with sufficiently marked connexion with the paralysis to suppose them a part of it. Besides, it as often happens that it is an arm alone, without any affection of the leg, or the leg alone, without affection of the arm; conditions which could not happen if the paralysis had a cerebral or spinal origin, except we suppose only the roots, the nerves beyond the cord, to be affected—a very uncommon occurrence. Again, we have different parts of the same member affected by different degrees of paralysis. As, for instance, the upper portion of the arm, especially the deltoid, while the hand and fingers remain comparatively sound; or it often happens that the arm and shoulder, including the deltoid, may be unaffected, and the hand utterly useless. In some cases it is the flexors of the arm which are mostly paralysed, but in others it is the extensors. The same is true of the wrist and hand. If one set of muscles more generally retain and other sets more generally lose a greater amount of force, it seems to depend on other conditions than the paralysing cause; which, if it resided in the brain or spinal cord, ought to and does affect all portions in a given radius alike. With regard to the unequal distribution of the paralysis, we find a curious illustration in paraplegia. In all cases of paraplegia which have come under my observation, the relatively weak and strong muscles alternate, on the same leg and on each leg. That is, if the extensors are weak on one leg, they will be relatively strong on the other; while the flexors will be strong on the first and weak on the other; and so on, alternating to the very toes.

But what is the pathology of this affection? Infantile paralysis is wholly peripheric, and seems to be caused by *a conservative effort of nature*, while under great nervous depression, *to save the whole by abandoning a part.* Under certain circumstances, it seems to be necessary temporarily to withdraw the stimulus of the nervous system from an extremity, that more central and vital organs may not fail. So that the child, instead of dying from exhaustion, recovers with a paralysed limb; or, more properly, recovers except the paralysed limb. But when the nervous stimulus is even temporarily withdrawn from a part, there immediately takes place a deterioration in the conducting power of the nervous tracts and of the irritability of the muscles—for every function is kept up by its exercise;—and this condition of things is relatively increased by a corresponding exaltation of nervous and muscular power in all other portions of the system. For it almost invariably happens that *the general health is improved* after the paralysis, instead of being enfeebled, as is the case in other forms of paralysis, and as should be the case if there were disease of the brain or spinal cord. Certainly, in no instance have I found that the paralysis had produced any permanent disturbance of the general functions. This relative disproportion of innervation and muscular action once set up between different parts of the body, is kept up and propagated continually as the *habit* of the system. Thus we have very little improvement after the first few weeks of reaction. The instinct of the individual to do whatever is to be done in the easiest manner, makes him use the better parts and members with the same readiness with which he avoids the affected ones. And so there is no point where this state of things can be easily interrupted. Thus the atrophy of the paralysed member and the development of the rest of the body continue indefinitely.

(To be Continued.)

SOME OF THE EFFECTS OF TOBACCO.

By P. J. FARNSWORTH, M.D.,

OF LYONS, IOWA.

Mr. L——, aged 35, a plasterer by trade, called at my office Dec. 12, 1861, complaining of sore throat, together with partial anæsthesia of his fingers, toes, and end of his tongue. According to the statement he made to me, he had always been regular and temperate in his habits. He had a wife and four children. He was rather thin, and the noticeable feature about him was a partial anæmic or cachectic look. His appetite was good. As the numbness was not troublesome I thought it might be temporary, and did not at that time attempt any treatment. There was redness of the fauces, and a slight enlargement of the tonsils, for which I used a topical application of a weak solution of nitrate of silver. Dec. 20th he came again to the office for another application to the throat, complaining still more of the numbness. I was then led to make a more careful examination of his case, with a view to find some definite cause for these nervous phenomena. I could find no tenderness, either superficial or deep-seated. He had never been troubled with headache, had had no pain in the lumbar region. There was something in his look that suggested Bright's disease, and I accordingly examined the urine rigidly, but found nothing abnormal. I gave him some simple bitters, with a preparation of iron, and a blister to apply to the spine, between the shoulders, commencing the treatment with a dose of compound cathartic pills.

Jan. 1st, 1862, L—— was brought to the office, having previously been able to walk (the distance of five miles). Now the ride was too much for his strength. The numbness was increasing, his appetite was also somewhat inordinate, and the tendency to constipation, which previously existed, had increased; he had also lost flesh. I again examined the urine without detecting anything. Thinking it might be a miasmatic poisoning, ordered three grains of quinine three times a day, together with a laxative pill to be taken every night On the 12th of January I was sent for, as his strength had failed, and he was confined to the house. At this time I asked a neighboring practitioner to visit him in consultation. The numbness now seemed pretty general; his eyesight was somewhat affected. The heart beat somewhat irregularly, with a slight anæmic murmur. The tongue was slightly coated. The generative organs were participating in the general weakness; had no erections or sexual desires. Gave him tinct. fer. mur. gutt. x. three times a day, and agreed to the reapplication of the blister to the spine.

I called Jan. 15th, and found the patient in bed, very much dejected, and *smoking*. Having heard us discuss the

propriety of blistering, he had applied the blisters to the whole spine, and to the hips. He felt them but little, and was scarcely conscious of their presence, but they had produced an immense drain on the system, and he had failed very fast. I questioned him now about his smoking, and found that he had considered it so small a matter as not to mention it, but that for several years he had smoked the coarsest kind of tobacco in the foulest kind of a pipe, during all his waking hours. On further examination into his case, I was convinced that it was one of poisoning by nicotine. The want of feeling was now general; the motor powers were active enough; he could hold his knife in his hand firmly when his eyes were directly on it, but if he looked away the knife dropped. He walked with difficulty, because he must needs look where his feet fell, as he could not feel them touch the ground. I advised him to stop his smoking at once, and ordered an ounce of brandy and potass. iod. gr. v. three times a day, friction to the surface, and a Dover's powder at night, as he had become very wakeful.

On the third day after I found the patient somewhat improved, but now alarmed at the quantity and quality of his urine; it was very highly charged with a red sediment, which proved to be urea, urate of ammonia, and triple phosphates; with a distinct odor of nicotine. The Dover's powder acted as a diaphoretic, conjoined with the friction; and he complained of a fetid sweat. His wife said that now he had discarded the pipe, the fumes of it were exuding through his skin. Continued the brandy and the potass sod. and gave him tinct. fer. mur. gutt. xx. three times a day. On the 22d inst. I found the patient improving, the urine becoming more natural, but the perspiration was profuse at night, having the same nicotine odor. Sensibility did not return as fast as the strength; he was obliged to use his reason about cold and heat, and in regard to taking food. Cold was scarcely felt, and but little taste was left. Even his exercise had to be regulated by his judgment, and not by his feelings. I continued the tinct. fer. mur. and the potass iod., giving an occasional dose of sulph. magnesia, to move the bowels.

Jan. 29.—The patient still improving, the numbness going off in the same manner that it had come on—passing downwards towards the extremities. I continued the iron, ordered a nourishing diet, the bathing every evening with friction, and an occasional Dover powder.

From that time until March he continued to improve, the numbness having passed to the ends of the fingers and toes, and the end of the tongue. He was then able to walk the five miles to see me; the waxy look had passed off; and the look of health returned. At this time, for experiment sake, he tried to smoke a cigar. It produced nausea and all the feelings that tobacco does to a novice; together with a return of the numbness of the fingers, and a smarting of the fauces.

I consider this as an illustration of the effects of the slow introduction of tobacco poison into the system. I have been unable to find any such effect ascribed to it in any work I have at hand. Dr. Prout, quoted by Pereira, says, "It disorders the assimilating functions in general; but particularly, as I believe, the assimilation, of the saccharine principle. I have never indeed been able to trace the development of oxalic acid to the use of tobacco; but that some analogous and equally poisonous principle (probably of an acid nature) is generated in certain individuals by its abuse, is evident from the cachectic looks, and from the darkened, often greenish-yellow tint of their blood."

Pereira says, "I am not acquainted with any well ascertained ill effects resulting from the habitual use of smoking."

He is probably a lover of the "weed" himself, or had not made close observation of the smokers around him, for it is my opinion that scarcely one in five but that is injured by tobacco. It acts as a nervous sedative or depressant, causing an exhausted feeling at the stomach, and I have good reason to suppose that smoking is the great cause of the universal dyspepsia with which we are troubled.

It sometimes produces tremor of the nerves, and in many cases, instead of being a temporary sedative, destroys the tone of the nerves and produces languor and fretfulness, and often effects like those above described, though not in every case in so marked a degree. In a majority of smokers and chewers of tobacco, it acts like a violent poison, which it is, introduced slowly.

Progress of Medical Science.

NEW SYMPTOM OF SCARLATINA.

M. Bouchut (*Gaz. des Hôp.*) mentioned to his class a diagnostic symptom which he had never found fail to enable him to distinguish scarlatina from any other exanthem, and the knowledge of which may prove of utility in doubtful cases. "It is the disappearance of the eruption for a minute or two under the influence of slight friction. If with the point of the finger or the nail we trace a line, this becomes and remains for a minute or two white amidst the surrounding redness of the skin. We can, so to say, write the diagnosis of the affection on the skin, as in the present case, in which the word 'scarlatina,' traced by a bit of wood, became in a few seconds designed in white letters, which remained quite distinctly visible for about two minutes. This is due to the exaggeration of the contractility of the capillaries induced by the friction temporarily expelling the blood from their interior. Nothing of the sort is observed in measles, erysipelas, or other cutaneous eruptions, in which the half-paralysed capillaries possess but little contractility. We can in these by pressure drive out the blood from the capillaries, and produce a white spot, but this is a purely mechanical action, and as soon as the pressure is removed the redness reappears."—*Med. Times and Gaz.*

THE TREATMENT OF PNEUMONIA BY THE SUPPORTING PLAN.

Dr. J. Hughes Bennett of Edinburgh gives in the *British American Journal* the results of one hundred and fifty carefully recorded cases of pneumonia, treated by him during the last fourteen years. About eighteen years ago Dr. Bennett first began to doubt the propriety of the antiphlogistic treatment, for the following reasons: "In the first place, the cause of the inflammation is an irritation of the textures—of the ultimate molecules of the part—in consequence of which their vital power of selection is destroyed, and that of their attraction is increased. The removal of blood by venesection cannot alter this state of matters, neither can other lowering remedies. If the inflammation be superficial and limited, local bleeding may relieve the congestion, as in conjunctivitis; but, if exudation have occurred, it cannot remove that. In the second place, an exudation or true inflammation having occurred, it can only be absorbed by undergoing cell-transformation. Now this demands vital force or strength, and is arrested by weakness. Inflammations in healthy men rapidly go through their natural course; in weak persons, they are delayed or arrested; hence their fatality. In the third place, the strong pulse, fever, and increased flow of blood in the neighborhood of inflamed parts, have been wrongly interpreted by practitioners. They are the results, and not the causes, of inflammation, and show that the economy is actively at work repairing the injury. So far, therefore, from being interfered with and interrupted, they should be supported by nutrients. It follows, fourthly, that if these views be correct, the true treatment of inflammation should be directed towards bringing the disease to a favorable conclusion by supporting rather than diminishing the vital strength of the economy; and this not by over-stimulating, as was done by Dr. Todd, but simply by attending to all those circumstances which restore the nutritive processes to a healthy condition." By a reference to statistics he shows that the rate of mortality of this disease is propor-

tionate to the amount of antiphlogistic treatment which it has been subject to, ranging from 1 in 3 to 1 in 13. In his one hundred and five cases, however, only three deaths occurred, making a ratio of 1 in 35. Of the three deaths, all were complicated cases, one of intestinal ulceration, one of Bright's disease, and one a drunkard with delirium tremens and cerebral meningitis. The difference in the result of treatment he cannot ascribe to any alteration in the type of the disease from what it formerly was, but to the advances which have been made in physiology and pathology, and he desires no better proof of the truth of that fact than in the diminished mortality that everywhere now accompanies attacks of acute inflammations. His practice is directed "to support the strength of the economy, never to weaken it in any stage by antiphlogistics; although, if dyspnœa be urgent, cupping, or a small bleeding, may be practised as a palliative, more especially in bronchial or cardiac complications. During the febrile excitement, mild salines are administered. On the fourth or fifth day, when the pain has abated, good beef-tea and nutrients are administered; and, on the pulse becoming soft or weak, from four to eight ounces of wine daily. As the period of crisis approaches, slight diuretics are given, to favor the excretory process." In conclusion he states the following facts.

"1. That simple pneumonia, if treated so as to support instead of lower the nutritive processes, so far from being a fatal disease, invariably recovers.

"2. That the cause of mortality in these cases is exhaustion, either before they come under medical supervision, or, as formerly practised, from an antiphlogistic or lowering treatment. All bleedings that do not exhaust must be regarded as palliative, rather than as curative; and their influence has yet to be determined with exactitude.

"3. That the same rule applies to all inflammations; the amount of danger being in direct ratio to the weakness of the system and the existence of complications in other viscera, or from blood-poisoning."

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, June 11, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

(*Continued from page* 177.)

DISTENDED CYST ABOVE THE BLADDER, AND CONNECTED WITH IT.

Dr. Sayre exhibited a bladder distended in its upper portion, into a cyst measuring longitudinally twenty-six inches, transversely twenty-five inches in circumference, taken from a man 63 years old, who had suffered many months past with disease of his kidneys; his urine containing albumen and pus with the usual casts. He had œdema of the lower extremities to such extent as to require the recumbent posture for the last two months; the œdema gradually subsided subsequently—there was gradual distension of the abdomen. His attending physician presuming it was ascites, his respiration becoming seriously interfered with, I was called some two weeks ago to perform paracentesis. I found him lying upon his side, turned over almost on his face, with very short and hurried respiration. Pulse 140, intermittent and very feeble. Very anxious countenance, speaking with great difficulty. I made my arrangements for the operation. On raising his shirt for puncturing the abdomen, my attention was immediately arrested by the peculiar form of the abdominal tumor which was projecting from above the umbilicus, very prominently forward and downward, very like a woman in the last month of pregnancy. But the lateral regions of the abdomen were very much drawn in and flattened, more narrow than what was normal, made so by this anterior distension, which I took to be a tumor in connexion with the bladder. Fluctuation was very distinctly felt as in ascites. But from the peculiar shape of the abdomen, I was satisfied that the fluid was in the bladder, and not within the peritoneal cavity. Therefore, I refused to operate. Upon questioning him, I found he could pass his water at will with some force in a stream; but for some time when asleep, it came from him guttatim without his knowledge. Upon introducing a catheter, a little more than two quarts of a milky, turbid fluid was drawn off, producing a proportionate diminution of the tumor. A large tumor still remained fluctuating as before, and upon moderate pressure a few ounces of fluid of the same character were passed off. Suddenly the fluid ceased to run. Thinking the eye of the catheter was obstructed, it was withdrawn to be cleaned. It was found pervious, and was again introduced, when on gentle pressure on the abdomen, several ounces more of the fluid were passed off, when it suddenly stopped, and no effort I could make could remove any more of the fluid.

The patient died that night. The post-mortem was made twenty-four hours after by Dr. Prince. The bladder was injected to its utmost capacity, and a string tied around the penis to retain it. The abdomen then presented the same size and shape as when I first saw it, which being so peculiar, I had a plaster cast taken of it. On a section of the body, the lungs were found perfectly healthy. The peritoneal cavity contained an unusually small quantity of serum. The principal contents of the abdominal cavity was the tumor now presented.

Dr. Sayre then opened the cyst before the society, found it unilocular; there were five and a half pints of fluid in it. On introducing a sound into the bladder, he could not pass it through to the cyst; the connexion was supposed to be valvular. Dr. Prince, in his examination, passed a probe through the valvular connexion. Dr. Sayre considered that the cyst was produced by ulceration of the inner coats of the bladder, the external resisting, therefore, this cyst was thus formed. There was no muscular fibre about the cyst?

Dr. Prince, in connexion with the case, stated that the patient was very much emaciated, with a protuberant abdomen, similar to that of a woman in the seventh month of pregnancy. Upon opening the abdominal cavity, the omentum first appeared to be absent, but on careful examination was found to be adherent to the superior and posterior portions of the tumor. In fact, the whole contents of the abdominal cavity were strongly adherent to each other, so that it was impossible to separate the tumor from the intestines without the use of the scalpel; and wherever the contents came into contact with the peritoneal surface, it was adherent. The remarkable feature of the contents of the abdominal cavity was the total absence of all adipose tissue. The kidneys were in their usual position, rather larger than usual, the cortical portion soft, granular, friable. The pelves were very much enlarged, obliterating the medullary portion to a great extent, and filled with the same peculiar fluid as that of the tumor presented. In connexion with the right kidney was an abscess which was connected with the pelvis, containing about ℥ iv. of fluid, similar to that in the pelvis. The tubuli uriniferi were very much enlarged. The ureters were about the size of the little finger. Upon turning out the contents of the abdomen, we found the tumor in connexion with the bladder as presented. The liver was soft and easily broken up; in other respects natural.

The history of the case is as follows:—Twenty years ago he was kicked in the abdomen by a horse, and thrown some ten or twelve feet, remaining insensible for some half hour or more. He dates the difficulty of the kidneys from this accident. He was not particularly inconvenienced by the disease of the kidneys until about two years since, when œdema of the lower extremities made its appearance. The urine at times was thick, and copious white sediment was found in the bottom of the vessels, which continued until his death. About ten years since a fistula in ano made its appearance, which continued till within six months of his decease, when the track closed. Whereupon his

symptoms were very much aggravated, the œdema of the lower extremities increased very rapidly, the discharge of sediment in the urine increased to an alarming extent, with addition of blood, at the same time several small abscesses made their appearance about the nates and lower extremities, which I opened. At the same time I passed a narrow-bladed instrument along the track of the fistula to open it, but with very imperfect success. The appetite was very variable, debility increased, he being at the time mostly confined to the house. As the œdema of the lower extremities decreased, the protuberance of the abdomen increased, and it was consequently considered a transfer of serous exudation from the lower extremities to the abdominal cavity. As the fluid increased in the abdominal cavity, his symptoms were greatly aggravated, dyspnœa was a prominent symptom, nausea and occasional vomiting interfered materially with his comfort and prolongation of life. He was regular and abstemious in his life.

Dr. Krackowizer suggested that the cyst might be a hydatid of the bladder.

STRANGULATED HERNIA (SCROTAL).

Dr. Finnell presented a specimen of strangulated hernia taken from a man aged 50 years, who died recently in St. Vincent's Hospital. The patient had been afflicted with congenital hernia from infancy, but by means of a truss he was able to retain his rupture without much inconvenience. Slight strangulation took place on several occasions, but on resuming the recumbent posture and making moderate pressure, the tumor soon disappeared. The day before his admission to the hospital, the hernia again became strangulated, and all attempts on the part of the patient to relieve himself entirely failed. When I first saw him, the evi lences of severe strangulation were very apparent, and the necessity of an operation was very decided. Chloroform was at once administered, and an incision made in the length of the tumor. After the division of several layers of old fibrous tissue, a transparent sac was at length brought into view; it was opened and found to contain about two ounces of clear serum without any intestine.

A dissection being made in another part of the tumor a second sac was found, which contained omentum. A third sac was at length found, which contained the strangulated intestine, and a quantity of bloody fluid. The strieture was next divided, the parts returned, and the patient placed in bed. No reaction took place; he gradually sank, and died twenty-four hours after th e operation.

Dr. Sayre asked the experience of the Society, in regard to the frequency of femoral hernia in the male. Dr. Buck answered, that he occasionally met with it.

Dr. Buck related a case of strangulated femoral hernia of a female, occurring lately in St. Luke's Hospital, whom Dr. Peters operated upon, which was somewhat similar to the one Dr. Finnell had; the tissues were adherent, and injected; a cyst was encountered containing bloody serum, the true sac contained only omentum, which had been so injured that, anticipating sloughing and its deleterious effects, it was removed.

Dr. Sayre stated, that he had three cases of strangulated hernia that he had operated upon within the past eleven days. 1st. A man, aged 60 years, who had had scrotal hernia for forty years. When first called to him, found he had a large scrotal hernia that he was unable to reduce. The patient had no vomiting. Diagnosed it omental. He told the patient of his danger, and the necessity of an immediate operation, to which he would not consent. In a few days, the patient having changed his mind, Dr. S. was again sent for. He operated in his usual manner, viz by pinching up the integument, with all the layers down to the sac, and then making an incision from the sac outwards. He found the omentum so injured by strangulation, that he advised its removal. He was overruled, on consulting with the surgeons present, and then returned it into the abdomen. In a few days he died from prostration. Autopsy revealed a sphacelous state of the omentum. 2d. A female, with strangulated femoral hernia, whom he operated upon. Was doing well to the fifth day, when an erysipelatous state about the wound was noticed. On making an opening, there was a discharge of pus. By placing her in an invalid's chair in a semi-recumbent position, and by proper treatment, she recovered in six weeks satisfactorily without peritonitis. 3d. A young man, a Spaniard, with strangulated femoral hernia, about the size of a black walnut. His first ease in the male. By his mode of operation, he opened down to the sac at once, and by snipping the edges of the ring, was enabled to reduce it readily. The patient recovered rapidly. He called at the office of Dr. S. one week after the operation.

The Society then adjourned.

American Medical Times.

SATURDAY, OCTOBER 4, 1862.

MEDICAL EXAMINATION OF CONSCRIPTS.

The medical examination of conscripts is about to present a novel duty to the profession. The examinations of recruits has thus far been confined to those who desired to enter the service, and who consequently concealed or made light of their disabilities. But it is presumed that the conscript wishes to escape service, and to do so, feigns disease, or occasionally maims himself. The latter examination is much more difficult than the former, involving often the nicest discrimination of appearances, and the most careful study of symptoms made conspicuous but without an adequate cause. All the most recent methods of investigation must be applied, and oftentimes with much more skill than in ordinary examinations.

The feigning of disease by conscripts has long been practised, and most governments have passed stringent laws relating to it. Charondas, among the Greeks, punished those who employed stratagem to avoid going to war, by exposure in the dress of women on a scaffold for three days. In the Roman State conscripts often maimed themselves. Some cut off their thumbs (*pollice trunci*, poltroons), as has already been practised in Connecticut. But they were still compelled to serve. Theodosius ordained that two maimed conscripts furnished by a district should count only as one efficient recruit in the prescribed levy. Constantine ordered that persons self-mutilated should be branded, and still retained in service. Other emperors punished persons who maimed themselves to avoid serving in the campaigns of the Republic still more severely, and Augustus even put some to death. In modern times, persons endeavoring to escape service by feigning disease or disabling themselves, have been sentenced to imprisonment, to receive corporal punishment, or have been compelled to serve in the army for life.

To determine the nature of the complaint of the conscript, whether true or feigned, it early became necessary to call in the services of physicians. And it is not very creditable to our profession to find in subsequent legislation evidences of the connivance of the examining surgeon with the recruit to effect the exemption of the latter. In the *Code de la Conscription* is a regulation to this effect:—"Officers of health and others, convicted of having given a false certificate of infirmities or disabilities, or of having

received presents or gratifications, were to be punished by not less than one or more than two years' imprisonment, or by a fine of not less than 300 or more than 1000 francs." In 1818 it was ordered by the French Government that medical officers who were proved to be accomplices of persons endeavoring to escape service when called upon, should be imprisoned from two months to two years, besides being fined 200 to 2000 francs. Still later, the surgeon who gave false certificates for liberation or exemption from the public service, should be punished with from two to five years' imprisonment, and if he accepted bribes and promises the penalty was banishment. Other governments have found it necessary, and we acknowledge the fact with shame, to introduce a clause punishing more or less severely the delinquent medical examiner of conscripts.

The severe European wars of the early part of this century, and the frequent conscriptions that were made, added so many to the exempts from disability that the fact arrested public attention. More thorough investigation was made into the character of the diseases of those claiming exemption, when it was found that vast numbers were simulated or self-inflicted. This led to a more systematic study of feigned diseases, and the subject became one of great public importance, for upon it often depended the integrity of the army. During the last quarter of a century great advances have been made in establishing upon correct principles the proper interpretation of feigned diseases. This is seen in the comparison of the French conscription with recent investigations. From 1800 to 1810 every available man was pressed into the service of the French army, and yet, in every one thousand rejections, there were found, idiots 8, deaf 17, short-sighted 58, stammerers 9, epileptics 21, diseased eyes 121, pulmonary affections 169. Recent examinations show for one thousand rejections, idiots 5, deaf 2, stammerers 3, epilepsy 1, diseased eyes 63, pulmonary affections 7. It is proper to infer that the balance in conscription were feigned diseases or defects which the examiner could not detect.

The diseases which conscripts feign are found to embrace the whole category of human ailments. Ludicrous as was the scene at the bar of Jupiter when all the sick and maimed of the earth came forward to exchange diseases, it will be surpassed by the concourse of disabled which will throng the examiner's office. Hundreds who have always been regarded by their intimate friends as sound in "wind and limb" will now be found to be hopeless asthmatics and confirmed cripples. Many heads have become grey from the neglect of hair tonic, and many eyes have fallen from their sockets, leaving sad evidences of the insidious workings of age and disease. Every physician must have noticed the increase among his male patients of hernia, varicocele, varices, distressing coughs, and evidences of hereditary insanity, epilepsy, apoplexy, etc. To discriminate between the false and true will require great experience, care, and skill, in the diagnosis of disease. While it is of the greatest importance to detect the impostor and hold him to strict accountability, it is not the less important to the public service, and but common justice to the individual, that the genuinely disabled should be exempt. If the latter is pressed into the army he becomes at once an incumbrance. He may endure the slight fatigue of the camp, and become a well drilled soldier, but the first exposure or fatiguing march sends him to the hospital, an invalid for the remainder of his term of enlistment.

The medical examination of persons claiming exemption from service under the present draft, and alleging disability, will be a most responsible duty. It will require on the part of the examiners, to properly discharge their duty, not only honesty and integrity of purpose, but a large experience in the practical study of disease. A distinguished medical author has very justly remarked: "It is obvious that the more we know of disease by reading and observation, the more patience and temper we possess, the more successful shall we be in the detection of imposture." A writer on this subject has given his opinion, "that the wiles of soldiers in hospitals will be more certainly discovered by those who have an accurate knowledge of disease, obtained from clinical observation and pathological writings of authority, than by those possessing natural sagacity in the highest degree, if unassisted by a habit of carefully contemplating and studying disease." The Chief of the army medical department of the Prussian army states, "that a knowledge and experience greater than is generally believed, along with an acquaintance with anatomy, physiology, and pathology, is especially required to decide upon the health and general efficiency of recruits, and to distinguish between defects that may be real from those that are only feigned." We hope the very best men in the profession will be selected by the State authorities to perform this public service. Massachusetts has already set an example worthy of imitation. Among the examiners appointed we recognise the most distinguished medical men. If her example is followed the service will be an honor to our profession.

THE WEEK.

It is surprising what indifference our authorities manifest to the deficiencies in the provision for the wounded in the field. Early in the war we urged the formation of an efficient ambulance corps, a most important provision for the succor of the wounded in modern warfare where projectiles are so unerring. No civilized nation is now without this corps attached to its armies; even the rebels have a special organization of this kind, and each member has on his cap the title "Ambulance Corps." But we still adhere to the old system, and either disgracefully leave our wounded on the field, or, whenever a man falls, two comrades carry him to the rear. The result is that the wounded are, at best, indifferently cared for, and the effective strength of the army is greatly reduced in an engagement. The late battles so painfully demonstrate the absolute loss of life due to the absence of proper transportation that it is impossible for the proper authorities longer to refuse this most important organization. Surgeon-General Hammond, in his efforts to render the medical branch of the army effective, has used every means to form an ambulance corps, but his efforts have proved unavailing by the opposition of higher authorities. Dr. Agnew, of the Sanitary Commission, estimates the loss of life in the recent battle at Antietam, due solely to want of proper transportation, at five hundred! Such wanton, reckless waste of human life will not be tolerated by the people, and the proper reform will now be instituted.

—

The Sanitary Commission contemplate establishing a Directory which will contain the names of all the sick in the military hospitals, with the name of the hospital in which each individual is located. This will be constantly revised so as

to make it possible for any one applying to learn the location of a friend at once, to be informed of the particular hospital in which he is placed. This will involve an immense amount of details, but if successfully accomplished, it will give great satisfaction to the public, and save much suspense and heartburning. We learn that Dr. Geo. H. Tucker, of this city, is engaged in perfecting the plan. It could fall into no abler hands.

—

An apparatus has recently been contrived by Alois Peteler, of New Brighton, Staten Island, for the more thorough ventilation of ships and hospitals. The principle of its construction is simple, and we see no reason why it should not meet the designs of its inventor. Besides mere ventilation by the pumping out of air from a hold or room, the temperature can be lowered to any desirable degree. This is accomplished by forcing the air by means of an arrangement through a spiral channel surrounded by pounded ice. Some time since we had occasion to make some remarks upon the bad health of our seamen as due to the lack of ventilation and the heat of our iron-clads. Mr. Peteler's apparatus promises to remove, if not entirely, at least in a great measure, the objections we urged against such a style of vessel. We hope a fair trial will be made of its utility.

—

We shall be able in future, through the kindness of gentlemen connected with the Assistant-Surgeon-General's office at St. Louis, to keep our readers informed of all the doings of that department of the new Medical Bureau. Although of comparatively recent organization, it has already, under the able management of Dr. R. C. Wood, exerted an immense influence over the whole department of the West. An account of some of its operations may be seen under the proper heading.

—

Our next issue will be the Students' Number, and will contain an account of all the Medical Colleges throughout the North, besides other matters of interest. Some of the schools have closed since last year, and others have failed to send us catalogues, but we have spared no pains to make note of all changes that have come to our knowledge.

Medicinal Properties of Wild Thyme.—M. Joset states, that by the simple administration of an infusion of wild thyme, slightly sweetened and mixed with gum, he has observed the improvement and even the cure, as if by enchantment, of cases of hooping-cough, taken indifferently at all the periods of the disease. The same was the case in stridulous sore throat, and in convulsive and catarrhal coughs. In the worst cases of hooping-cough the pathognomonic paroxysms, although they did not entirely disappear at the end of a few days, became so much modified in their character, that the disease resolved itself into a case of simple bronchitis, which was easily treated. These remarkable cures, so rapidly effected, and obtained only by the administration of wild thyme, have led M. Joset to look upon this plant as a sovereign remedy, and in some degree a specific one, in the affections of the air-passages. The employment of this plant is not a novelty, for it was formerly recommended very extensively in the treatment of obstinate coughs, and it enters into the formation of some popular powders and syrups. M. Joset advises it to be given in the form of a concentrated infusion, slightly sweetened, to be taken in any quantity which the patient can drink, and until the desired effect is produced. The favorable result has generally ensued at the end of a very few days.—*Brit. and For. Med.-Chir. Rev.*

Reviews.

A Practical Guide to the Study of the Diseases of the Eye, their Medical and Surgical Treatment. By Henry W. Williams, M.D., Fellow of the Massachusetts Medical Society, Honorary Fellow of the Rhode Island Medical Society, Member of the American Medical Association, etc. Boston: Ticknor and Fields. 1862. 12mo. Pp. 318.

The task that our author has here imposed on himself is one indeed difficult of fulfilment. Since, thanks to the investigations and discoveries of the last ten years, our knowledge of the nature and treatment of diseases of the eye has been, in many important respects, completely revolutionized; a convenient text-book that would embrace, within moderate limits, the results of the more important investigations of the new school, at the same time retaining what was really of value among the teachings of the old, has been a desideratum in the medical literature of our own, as of every other, language.

Dr. Williams has presented, in a form adapted to the comprehension of any student, a resumé of the more patent, and, till of late, best understood affections of the eye. The descriptions of disease are good, the treatment in many instances judicious, in others doubtful. The general opinion of the present day has not pronounced in favor of the exclusive use of the sulphate of copper for the treatment of granulations, or mild astringents in gonorrhœal ophthalmia, nor has nitrate of silver been generally discarded in ophthalmia neonatorum. The local application of calomel in phlyctenular conjunctivitis would hardly be stigmatized by our author as a mode of treatment "worthy of veterinary surgery," were he aware that it is fully endorsed and practised by many of the leading authorities of the present day. Bowman's method of treating obstructions of the lachrymal duct embraces the slitting up of the canaliculus from end to end as a necessary preliminary, and seems to be misunderstood by Dr. Williams, who counsels the mere enlargement of the punctum. A similar misapprehension, and one calculated to lead the individual following it into grave error, is evinced in the remarks on the treatment of conical cornea, where it is said that, in the operation recommended by Bowman in these cases, "the edge of the pupil is drawn through and allowed to form adhesions with a small puncture of the cornea." On the contrary it is that part of the iris, midway between its free and its ciliary edge, that is seized and drawn through the wound; thus leaving the entire circumference of the original pupil in the anterior chamber. And, while the remarks of the author on the constant and unremitting use of mydriatics in iritis are eminently proper and judicious, his doctrine of the absolute proscription of mercury is one that has found little favor among oculists either at home or abroad.

The chapter on affections of the crystalline lens is elementary and intelligible. We think that, in the remarks on extraction, the advantages of making the corneal section upwards are overrated, and are somewhat surprised to find a rather minute description of the now obsolete operation for breaking up the lens through the sclerotic. We know not how strongly to insist on the principle that the operation of reclination or couching, recommended by the author to "surgeons of small experience," is unscientific in theory and dangerous in practice; and, in view of the recent improvements in the linear and flap operations for extraction, wholly unjustifiable at the present day. We are happy in being able to state that the leading surgeons of our own city in this department have followed the example of their European brethren in discarding this operation.

In the chapter on operations for artificial pupil, we are met by the statement that this operation is "not to be advised where the other eye is still healthy, as more embar-

rassment would arise from the want of harmony in the two eyes, than benefit in the amount of vision obtained in the eye operated on." We had supposed this antique objection set at rest, not only by the observations of Desmarres, who earnestly combats the view expressed by the author, but by the writings of Graefe, who gives as the result of his very considerable experience, that, in many cases, common vision of the two eyes is retained; and, where this is not the case, the general advantages of an enlargement of the field of vision, and an increased acuteness of perception, are still secured.

The chapter on glaucoma is incomplete and unsatisfactory. Very little stress is laid on the premonitory symptoms, the two most weighty of which—increasing presbyopia and arterial pulsation—are not even alluded to. That the end and object of iridectomy, as applied to this disease, is wholly misunderstood, is evident from the statement gravely made that this operation is performed "with a view of affording free communication between the posterior and anterior chambers," a communication that already exists. The operation of Nunnely, referred to in the text as one of the methods that may be employed, is one that has met with little or no favor either in the country of its origin or amongst us, where we believe we may claim the surgical treatment of glaucoma in its various forms to have been very thoroughly tested. And we cannot, in this connexion, forbear expressing our unqualified reprobation of the advice, given by Dr. Williams, to essay in this disease "measures for the improvement of the health of the patient" before proceeding to operative interference. We had supposed the conviction universal of the utter hopelessness of any but surgical treatment in this affection, and of the extreme importance of its prompt application.

A very brief description of the ophthalmoscope is given early in the work, and a still more hasty notice of ophthalmoscopic diseases and appearances occurs in later chapters. In our judgment no treatise on the eye, however elementary its design, should be wanting in at least an attempt to do justice to so important a subject. And that it is practical, as well as important, a single instance may serve to illustrate. It has been observed that, in many cases of well marked near-sightedness, a white crescent or patch may be found partially or wholly surrounding the entrance of the optic nerve as seen with the ophthalmoscope. As the near-sightedness increases this patch is observed to grow larger and larger; smaller isolated spots of a kindred nature make their appearance on other portions of the fundus of the eye; and finally, if injudicious use of the eyes has pushed the myopia to its utmost, separation of the retina from the choroid and secondary cataract condemn the unhappy patient to irremediable blindness. This affection is an atrophy of the choroid, inflammatory in its nature, progressive in its tendency, of common occurrence, and amenable to treatment. Take the case now of a myopic student who comes to us and inquires whether the state of his eyes will allow him to continue his studies, or whether he can only preserve useful vision by avoiding books and a sedentary life. One glance with the ophthalmoscope settles the question. It shows us whether this affection is present, whether it is—in the case before us—progressive, enables us to establish a sure prognosis, and to recommend appropriate treatment. Had the invention of Helmholtz accomplished nothing else, this alone would entitle it to our lasting gratitude. We regret to say that, in the book before us, the affection in question receives no allusion.

The chapters on affections of the adaptive powers of the eye, and on the choice of glasses, need no notice from us here. They are but a resumé of the good old conventional theories on this subject; theories that were dominant before the application of the exact sciences to this department of medicine, and which have quietly died away before the investigations of Helmholtz, Cramer, and Donders. They are still, however, of interest in an historical point of view.

It is with feelings of sincere regret that we have felt ourselves constrained to pen so wholesale a criticism. But a careful and dispassionate perusal has left us no alternative; and we have felt that we could not, without a protest, let this book take its rank in our American medical literature as an exponent of modern ophthalmology.

Army Medical Intelligence.

NEW MEDICAL BUREAU.

It is known that a branch of the Medical Bureau of the Army has recently been established in St. Louis. Colonel R. C. Wood, U.S.A., Assistant Surgeon-General, has charge of its organization and administration. The jurisdiction of the new bureau extends over the following States: Michigan, Illinois, Indiana, Wisconsin, Kentucky, Tennessee, Alabama, Mississippi, and all States west of the Mississippi river. Colonel Wood's Staff consists of the following officers of the Regular Army: Surgeon Joseph B. Brown, late Medical Director of Keyes and Franklin's Corps d'Armée, a position which he filled with unusual ability through the campaign on the Peninsula, and Assistant Surgeons H. M. Sprague, and B. E. Fryer; the former having seen much service with the Army of the Mississippi, and the latter having recently been in charge of the "Mount Pleasant" and "Stone" Hospitals, Washington, D. C. There are also attached to the Department the following Medical Inspectors: Lieut. Colonel C. C. Keeney, U.S.A., Lieut. Colonel G. H. Lyman, U S.A., and Lieut. Colonel G. T. Allen, U.S.A. The Assistant Surgeon-General has recently returned from a tour of inspection to Corinth and other points in the south and south-west, having previously inspected the Hospitals at Chicago, and Quincy, Illinois, and Keokuk, Iowa.

Lieut. Colonel Keeney having inspected the camps and hospitals in Illinois, is now extending his tour to Fort Snelling and the Upper Mississippi. Lieut. Colonel G. H. Lyman is inspecting the hospitals and camps in Kentucky and Tennessee, while Lieut. Colonel Allen, having visited the hospitals and camps in Mississippi and Alabama, will repair to Helena, Arkansas, for the same purpose.

INSPECTION OF GENERAL HOSPITALS OF THE ARMY.

The following letter, addressed to certain of our most distinguished surgeons throughout the country, will sufficiently explain itself.

Office of the U. S. Sanitary Commission,
493 Broadway, New York, September 24, 1862.

Sir:—The Sanitary Commission propose to commence on the —— of October, a special inspection of the General Hospitals of the Army.

These are forty-seven in number, in the District of Columbia alone, and perhaps as many more in all other parts of the country; they contain, at this time, not less than 50,000 sick and wounded.

As this proposed service is additional to the duties of this nature heretofore performed by the Commission, and is for a higher purpose, they wish to secure the assistance of the best medical and surgical ability in the country for the work—as none but men of established position and character are able to carry the moral weight and influence with the Army Surgeons, essential to the practical success of this effort to secure the highest standard of professional excellence in the management of Military Hospitals.

The Commission propose to keep six inspectors constantly employed east and west, and to accept the services of such as can serve not less than a fortnight, whilst they ask no service for more than one month. The most they can offer the profession in the way of remuneration is $250 per month.

The scheme of this inspection is for the six months ending May 1st, 1863.

You are respectfully requested to designate before the —— October, when the books will close, the period, if any, for which you are willing to serve, and the precise date when you can most conveniently render the service. The Commission will, however, consider it a special favor if you will allow them to designate the time when your services will be most acceptable. If you can serve for two terms of a fortnight each, at an interval of three months, please to state. For the Western hospitals a month's service would be preferred.

The Commission is anxious that this duty shall be undertaken with the earnest and unselfish purpose of securing for our sick and wounded soldiers thorough and able hospital treatment by the detection and removal of all defects in administration or professional care susceptible of remedy or improvement.

Full instructions as to the form of the report required will be furnished at the proper time.

By order of the Executive Committee.

Very respectfully, your obedient servants,

W. H. Van Buren, M. D.
C. R. Agnew, M. D.
Wolcott Gibbs, M. D.

Correspondence.

DOMESTIC CORRESPONDENCE.

[To the Editor of the American Medical Times.]

Sir:—Washington may be called "The City of Hospitals." There are, at this present moment, no less than forty-three military hospitals in and around this city, with an aggregate of nearly 20,000 patients. The location of so many hospitals at this point must be a matter of purely military necessity, for in some respects a more unfavorable locality could not have been selected. You will remember that Washington is situated in a basin, which admits of but imperfect drainage. It is in fact a malarial region. No attention whatever seems to be given to the cleanliness of the city; the streets are ankle-deep with mud in the winter and dust in the summer; the drains and alley-ways are foul with the decomposing animal and vegetable matter. But, to cap the climax of municipal neglect of sanitary regulations, an old canal, extending circuitously up into the heart of the city, and which is the receptacle of many of its sewers, is allowed to remain partially filled with decomposing sewage and other matter the hot summer through. No tide water disturbs this receptacle of all uncleanness, but throughout the hot summer and autumn months it sends up clouds of poisonous gases which are diffused unseen over this valley. I stood a few minutes upon a bridge at midday, and watched the bursting of the innumerable bubbles of gases upon the surface of its green and stagnant waters.

You will remember, also, that for nearly two years Washington and its suburbs have been the camping ground of hundreds of thousands of soldiers, infantry and cavalry. This latter fact is sufficient of itself to condemn any locality as a place for a hospital. The vast amount of refuse which accumulates around camps tends to render their neighborhood unfit for the habitation of men, and much more for the restoration of the sick.

These considerations lead me to fear that the mortality in the military hospitals will be great, perhaps unprecedented. If the emanations from sewage and decomposing animal matter are the producing cause of typhoid diseases, then typhoid must yet be a prevailing endemic disease in the hospitals of this district. And if the exciting cause of pyæmia is an atmosphere impregnated with the emanations from human excretions, and if, as Mr. Paget teaches, the best remedy for this dangerous surgical affection is pure and unadulterated air, then pyæmia must yet complicate most of the cases of wounds without the adequate remedy.

But there is a certain necessity in the location of so many hospitals here. It is the nearest point from most of the severe battles at which they could be established. It is also the centre to which converge all the medical and hospital supplies. Finally, it is the headquarters of the Medical Department of the army. In the selection of sites for the different hospitals it has been quite impossible to consult only the sanitary interests involved. Vacant plots of ground had to be taken, and finally such churches as were of suitable construction for hospital purposes. Under these circumstances it seems to me that Surgeon-General Hammond has shown great discretion.

Grave complaints are made against the management of these institutions by the visitors from voluntary aid associations. They are, however, by no means always well founded, as I know from personal examination. Nor would it be surprising if mismanagement were the rule. It requires first rate executive ability, with a large amount of practical experience in hospital administration, to manage one of these institutions well from the first. But here are forty-three of those hospitals, averaging four or five hundred patients each, many of which were organized and filled in a day, and it is quite impossible to command a sufficient number of men with such qualifications to supply these places.

There are errors, however, in their management, and these the Surgeon-General is correcting with that promptness and decision which now characterize the administration of the medical department of the army. The people must be patient, and in due time we shall have a system of management introduced into all our military hospitals, which will render them the pride, rather than the opprobrium of the country.

At another time I shall give you some account of the individual hospitals.

The Medical Bureau is making herculean efforts to meet the immense demands made upon it. A single battle of a few hours renders it necessary to transport thousands of wounded many miles, to provide for their immediate wants, and establish hospitals for their future treatment. As far as human efforts can accomplish these ends in the shortest space of time, Surgeon-General Hammond does it, so far as his department is concerned. Before the late battle was over he personally visited the field, to superintend the arrangements for the care of the wounded. When we contrast the present energy of the Bureau with its past inefficiency, it should be a matter of public congratulation that it was reformed so early in the war, and a thoroughly competent officer placed at its head. But much as the department was improved by the late Act, it still needs greater independence and enlarged powers. As rank carries power, the grade of its officers should be raised; the Surgeon-in-Chief should be a Major-General, and every man in the medical staff should be promoted indefinitely according to merit on the field. The whole matter of caring for the wounded, transportation, etc., should be exclusively under the direction of the Medical Department. These reforms we hope yet to see made. During the absence of the Surgeon-General his official chair is occupied by Dr. Joseph R. Smith, U.S.A., formerly of New York State. Dr. Meredith Clymer, U.S.A., of Philadelphia, is at the head of a department devoted to volunteers.

The Sanitary Commission, which is the great arm of public charity, works most harmoniously in aid of the medical department. Every hospital is supplied with those articles of comfort for the sick which are not furnished by the Government, and in the pressing emergencies of the battle-field its agents are the first to raise the wounded men from the place where they fell, and administer stimulants and food. Its officers are energetic and untiring, and though but a voluntary organization it has all the order and method in the despatch of business that characterize the best directed branches of the public service. Its detail of office business is managed by Frederick Law Olmstead, Esq., the able Secretary, assisted by Mr. Knapp, and its Associate Secretaries Drs. J. F. Jenkins and J. H. Douglass.

Sept. 29, 1862.

American Medical Times.

SATURDAY, OCTOBER 11, 1862.

ADDRESS TO STUDENTS.

The claims of medicine as a life-pursuit are to-day being earnestly canvassed by more young men who are about to choose a profession, than at any other period in the history of this country. That crisis in our national affairs which has levelled all industrial pursuits, and which threatens to revolutionize our civil and social organizations, has given a strong upward impulse to the medical profession. The call for qualified medical men to enter the public service has been constant and urgent from the very commencement of this war; and that demand still continues to be made, and will continue until peace returns, and our military organizations are dissolved. Our civil war has thus opened a new field to the medical profession, and pressed into active and well rewarded service all its available talent.

In answer to the oft-repeated inquiry of students as to the advantages which the medical profession presents, we reply that they are increasing rather than diminishing. Within the last year Congress has authorized the addition to the medical staff of the regular army forty acting surgeons, and one hundred and twenty acting assistant-surgeons. In the same period, also, the enormous expansion of the army by the new levies, of itself has opened the way to the immediate employment of at least twelve hundred additional surgeons. But this is not the only source of demand for surgeons to the volunteer forces. By an Act of Congress a second assistant-surgeon is to be added to each regiment. Thus upwards of one thousand new positions were created. It may seem no difficult matter to fill these offices out of the ranks of a profession which is always full to repletion, but when we put each applicant to the test of a rigid examination as to his qualifications, it will be found no easy task to select the requisite number of qualified surgeons. The vacancies which this draft upon the profession will make in civil practice should not be lost sight of by those who intend to locate themselves immediately after graduation. Many a country town, affording a lucrative business to a competent physician, has been deprived of its medical practitioners, and now offers an inviting field to the recent graduate. But a new and perhaps still more important branch of army medical service is being developed, which will afford ample scope for the employment of all well qualified physicians. We refer to the military hospitals. These institutions are rapidly multiplying in all the different military districts, and the demand for qualified medical officers to manage them is becoming daily more imperative. The positions in these hospitals are in every respect desirable to the young surgeon; he not only has an opportunity at once to engage in the practical duties of his profession, and under circumstances most favorable for improvement, but he is rewarded with an ample salary. This latter is no small consideration to many young men, and if husbanded frugally, will afford an income sufficient to meet the first embarrassing wants of private practice. The navy suddenly expanding from fifty to three or four hundred vessels of war, demands a contribution from the medical profession. This service offers a remuneration that must be satisfactory to every recent graduate. We have then only the most cheering response to make to the medical student who is prospecting his future advantages. There never was a period when there was a greater demand for first-rate medical men. They are required in the army, in military and civil hospitals, in the navy, and in the vacant places in civil practice. And these drafts upon the profession are daily and almost hourly increasing, and the exigencies of the times brook no delay. The battle of to-day makes scores of medical vacancies to-morrow, and if not promptly filled, suffering and death are the consequence. Let no one, therefore, who has entered upon his medical studies with a proper preliminary education, and honorable and conscientious motives, doubt that he is qualifying himself for urgent and most responsible duties.

As many, perhaps most, of those who are now entering the medical schools are designing to enter the army or navy, if the present draft upon the profession continues to the time of their graduation, we shall conclude with a word of advice especially directed to that class of students.

The student who is preparing to enter the regular army should thus early be informed that he has undertaken no mean or trivial task. It has long been understood that the Army Medical Examining Board annually sifts from the graduating medical classes the few grains of wheat, and gives the chaff back to the country. It is certain that the examination for the army has always been of a very searching and critical character, and that of the whole number of applicants not a tithe have been found duly qualified. It may be thought that the best class of graduates generally choose civil life, but this is scarcely true. The army almost invariably attracts the foremost members of each class, and its medical staff may be said to stand as a fair exponent of the medical talent of the country.

But the system of medical education in this country has enlarged its boundaries and become more thorough, corresponding to the progress of the medical sciences, and we are gratified to notice that the Medical Bureau has, under its new organization, also raised still higher its standard of qualification. We had hoped to be able to present an outline of the examination which the candidate is now required to pass, but must defer it to another occasion. It will suffice to say that, while liberal and just, it is of the most rigid character, and that no one who is not a thoroughly qualified student need entertain the hope that he will succeed in the examination. We do not make this statement to discourage, but rather to stimulate the student to the highest possible endeavor in the acquisition of knowledge while there is opportunity.

A much inferior standard of qualification is established by the different states for the volunteer corps. In some sections the medical examination offers no bar to an appointment to the staff. But such considerations will influence no high-minded student, ambitious of excelling in his profession, nor would he thereby be induced to relax his efforts to lay broad and deep the foundations of his future reputation. However our state authorities may trifle with or disregard the qualifications of the medical officers of its regiments, one fact is certain, that their duties are most important, and every student designing to undertake them should aim at the most thorough preparation.

The Medical Examining Board of the Navy is but little, if any, less exacting than the Army Board. But few, comparatively, of those who apply for admission, receive its sanction. The examination takes the same wide range of subjects as in the Army, and thoroughly tests the student's educational qualifications. Whoever, therefore, has resolved to enter the Navy as a surgeon, should determine to qualify himself in every branch of scientific and professional learning.

MEDICAL COLLEGES OF THE UNITED STATES.

Session 1862-'63.

In the number of the Medical Times for Oct. 13, 1860, we gave a catalogue of all the Medical Colleges in the United States. At that time they numbered about fifty. The meagre list which follows proves the havoc which civil war has produced among our institutions of learning. Of the present condition of the Southern schools we are entirely ignorant; probably there is not one in existence. Nor can we speak confidently of the Northern schools. Many have suffered severely from the loss of Southern patronage, while some have had their classes enlarged by the increase of Northern students.

CALIFORNIA.

UNIVERSITY OF THE PACIFIC.—MEDICAL DEPARTMENT.—SAN FRANCISCO.

A. J. Bowie, M.D., Prof. of Path. and Pract. Med.
Isaac Rowell, M.D., Prof. of Chemistry.
L. C. Lane, M.D., Prof. of Physiology.
E. S. Cooper, M.D., Prof. of Anatomy and Surgery.
Henry Gibbons, M.D., Prof. of Mat. Med.
Hon. Geo. Barstow, Prof. of Med. Jurisprud.
S. B. Cole, M.D., Prof. of Obstet.

The fifth regular annual course will commence on the first Monday in November, and continue eighteen weeks; clinical lectures will also be given on Wednesday and Saturday of each week.

Graduation.—The Examinations will be so arranged as to permit the Commencement for conferring Degrees to be held early in March. The candidate must be of good moral character, and at least twenty-one years of age. He must have attended two full courses of lectures in some regular and recognised medical school, one of which shall have been in this college, and he must exhibit his tickets or other sufficient evidence thereof to the Dean of the Faculty. He must have studied medicine for not less than three years, and attended at least one course of clinical instruction in an institution approved by the Faculty. He must present to the Dean of the Faculty a thesis or dissertation upon some medical subject, in his own hand-writing, and of his own composition; and exhibit to the Faculty, at his examination, satisfactory evidence of his professional attainments. The degree will not be conferred upon any candidate who absents himself from the public Commencement, without the special permission of the Faculty.

Fees.—The fee to each Professor is $20, payable in advance. The Matriculation fee is $5: *to be paid but once.* The graduation fee is $50.

CONNECTICUT.

MEDICAL INSTITUTION OF YALE COLLEGE, NEW HAVEN.

Rev. Theodore D. Woolsey, D D., LL.D., President.
Benjamin Silliman, M.D., LL.D., Emeritus of Chemistry.
Eli Ives, M.D., Prof. Emeritus of Materia Medica.
Jonathan Knight, M.D., Prof. of Surgery.
Charles Hooker, M.D., Prof. of Anatomy.
Worthington Hooker, M.D., Prof. of Medicine.
Benjamin Silliman, Jr., M.D., Prof. of Chemistry.
Pliny A. Jewett, M.D., Prof. of Obstetrics.
Charles A. Lindsley, M.D., Prof. of Materia Medica.

The forty-ninth annual course of lectures in this Institution commenced on the 12th day of September, 1862, and continues *sixteen* weeks. The examination for degrees will be held immediately after the close of the lecture term.

Graduation.—The requirements for graduation are:—For graduates of College, two years' study, and the attendance on two courses of lectures in this or some other regularly organized medical college. For those who are not graduates, three years' study, and the attendance on two courses of lectures. The regular examinations are held at the close of the lecture term, and also by adjournment the day before commencement in Yale College, provided there are applications for examination. Certificates are required from some regular practitioner of medicine, that the candidate is twenty-one years of age, possesses a good moral character, and that he has pursued the study of medicine the required time. At the examination, candidates must furnish a thesis on some subject connected with medical or surgical science. The material for dissection is abundant, and furnished at a reasonable charge. A clinique is held at the State Hospital once a week during the lecture term.

Fees.—The fees for the lectures, which are required in advance, are $12 50 for each course, except that on Obstetrics, which is $6. Total, $68.50; Matriculation, $5 extra. Graduation fee, $15. Private recitations are held for such as desire them, daily. The instructors are W. Hooker, M.D., C. A. Lindsley, M.D., and L. J. Sanford, M.D. The year is divided into two terms. The first corresponds with the course of lectures in the Medical Institution. The second begins in the middle of February and extends to commencement, having a vacation of two weeks in the first part of May. Fees, for the first term, $10; fees, for the second term, $40.

ILLINOIS.

RUSH MEDICAL COLLEGE, CHICAGO.

Daniel Brainard, M.D., President, Prof. of Surgery.
James V. Z. Blaney, M.D., Prof. of Chemistry and Pharm.
J. Adams Allen, M.D., Prof. Pract. of Medicine.
J. W. Freer, M.D., Prof. Physiology and Surg. Pathology.
De Laskie Miller, M.D., Prof. of Obstetrics.
Ephraim Ingals, M.D., Prof. of Materia Medica.
R. L. Rea, M.D., Professor of Anatomy.
Edwin Powell, M.D., Demonstrator of Antomy.

The 20th Annual Session will commence, Wednesday, October 1st, and continue sixteen weeks.

Clinical Instruction.—The hospitals of the city, and the numerously attended cliniques at the College, afford large facilities for practical study of many varieties of disease.

Graduation.—The following are the requisitions for the degree of Doctor of Medicine, viz. The candidate must be twenty-one years of age, and possess a good moral character. Pursue the study of medicine three years, and attend at least two courses of lectures, one of which must be in this institution. Four years of regular and continued practice will be considered equivalent to one course of lectures. He must have attended clinical instruction during, at least, one college term; and have been engaged in at least one course of practical anatomy. And present a thesis on some medical subject, written by himself, on or before the first of February, and at the same time deposit

the graduation fee, which, together with the thesis, will be returned to him in case of withdrawal or rejection. Graduates of other respectable schools of medicine will be entitled to an *ad eundem* degree, by passing a satisfactory examination, paying the graduation fee.

Fees.—Lecture Fees, for the Course, $40; Matriculation Fee, $5; Dissecting Ticket, $5; Hospital Tickets (each), $5; Graduation Fee, $20.

MEDICAL DEPARTMENT OF LIND UNIVERSITY, CHICAGO.

David Rutter, M.D., Emeritus Professor of Obstetrics.
T. Deville, M.D., Emeritus Professor of Anatomy.
J. H. Hollister, M.D., Professor of Descriptive Anatomy.
H. A. Johnson, M.D., Prof. of Physiology and Histology.
A. L. McArthur, M.D., Professor of Materia Medica.
M. K. Taylor, M.D., Professor of General Pathology, etc.
F. Mahla, Ph. D., Professor of Inorganic Chemistry.
Edmund Andrews, M.D., Professor of Surgery.
Ralph N. Isham, M.D., Professor of Surgical Anatomy.
W. H. Byford, M.D., Professor of Obstetrics.
N. S. Davis, M.D., Professor of Practice of Medicine.
F. Mahla, Ph. D., Prof. of Organic Chem. and Toxicology.
H. G. Spafford, Esq., Professor of Medical Jurisprudence.
Horace Wardner, M.D., Demonstrator of Anatomy.

The regular Annual Lecture Season commences on the Second Monday in October, and continues until the First Tuesday in March following.

Fees.—Lecture Fees for the Winter Term, $50; Graduation Fee, $20; Matriculation Fee, $5; Dissecting Ticket, $5; Hospital Ticket, $6. All Fees are payable in advance.

Graduation.—Each candidate for graduation must furnish satisfactory certificates of having pursued the study of medicine and surgery three years, including the time of attendance on lectures; of being twenty-one years of age, and possessed of a good moral character. He must have attended two full courses of Lectures. Or, if he has attended one full course in any other Medical College, he may be eligible to graduation by attending *one* full course. He must also have attended to practical anatomy by dissections, and to hospital clinical instruction during one term. Each candidate must deposit with the Treasurer of the Faculty a thesis on some medical subject, written by himself, together with the graduation fee, on or before the first day of February in each term. Both will be returned in all cases in which, from any cause, the candidate fails to obtain the diploma. Each candidate must undergo a thorough and satisfactory examination in all the branches of medical science.

Clinical Advantages.—The Hospital of the Sisters of Mercy, located on Wabash Avenue, near Van Beuren street, is open for clinical instruction every morning in the week, throughout the Winter Term, attended by Profs. Andrews and Davis. The Chicago City Dispensary occupies a room in immediate connexion with the College, and is attended by Professors Andrews, Byford, and Wardner.

The Summer term of Instruction will commence on the second Monday in March, and continue until the first Monday of October.

IOWA.

IOWA STATE UNIVERSITY—MEDICAL DEPARTMENT—KEOKUK.

D. L. McGugin, M.D., Phys., Path., and Clinical Medicine.
Freeman Knowles, M.D., Obstetrics and Gen. Therapeutics.
J. C. Hughes, M.D., Surgery and Clinical Surgery.
Philip Harvey, M.D., Medicine and Microscopy.
(Vacancy), Chemistry and Materia Medica.
John W. Bond, M.D., Anatomy.
Henry Strong, A.M., Medical Jurisprudence.
D. C. Dewey, M.D., Demonstrator.

Graduation.—Candidates for Graduation: 1st. Must be twenty-one years of age, and present testimonials of good moral character. 2d. Must have attended two full courses of medical lectures, the last at the Medical Department of the Iowa University, or evidence of four years' respectable practice will be considered as equivalent to one course. 3d. Must have studied medicine three years (including lecture terms), under the direction of a respectable medical practitioner. 4th. Must furnish a satisfactory medical thesis (original and in his own handwriting) to be delivered to the Dean.

Clinical Instruction.—College Infirmary and the County Alms-house.

Fees.—Fee for the entire Course of Instruction, $15; Matriculation Ticket, $5; Demonstrator's Ticket (optional) $5; Hospital Tickets, *gratuitous*. Graduation fee, $30.

MAINE.

MEDICAL SCHOOL OF MAINE, AT BOWDOIN COLLEGE—BRUNSWICK.

Leonard Woods, D.D., President.
Israel T. Dana, M.D., Prof. Prac. of Medicine.
Amos Nourse, M.D., Prof. of Obstetrics.
John S. Tenney, LL.D., Lecturer on Medical Jurisprudence.
Timothy Childs, M.D., Prof. of Surgery.
Paul A. Chadbourne, M.D., Prof. of Chem. and Pharmacy.
David S. Conant, M.D., Prof. of Anatomy and Physiology.
W. C. Robinson, M.D., Prof. of Materia Med. and Therap.

The session for 1862 will commence on the 14th of Feb., and continue to the last of May.

Fees.—The fees for the full course, $55. The Graduation, including the Diploma, $18. Matriculation or Library fee, payable at once, $5. Pupils who have attended two full courses of Medical Lectures, one of which has been at this school, are admitted to all subsequent courses, without payment of any lecture fees. Students who have attended two full courses at other regular Medical Institutions, are required to pay one-third of the usual fees for admission to their first course of Lectures at this school, in addition to the Matriculation fee. Demonstrations in Anatomy gratuitous.

Graduation.—The examinations for the degree of Doctor of Medicine are held by the Faculty of Medicine at the close of the course of lectures, and also on the second Monday before the annual Commencement of the College, which occurs on the first Wednesday of August. The candidates must have devoted three years to their professional studies under the direction of a regular practitioner of medicine, and must have attended two full courses of medical lectures in some regular, incorporated medical Institution, and the last course previous to examination must have been at this Medical School. They must also pass a satisfactory examination, and must also read and defend a thesis or dissertation on some medical subject, in the presence of the Faculty of Medicine. Those candidates who have not received a collegiate education, must satisfy the Faculty of their proficiency in the Latin language and in natural philosophy. Degrees are conferred at the close of each course of lectures, and at the annual Commencement of the College in August.

Clinical Advantages.—Medical clinic, by Dr. Childs; surgical, by Dr. Conant.

MARYLAND.

UNIVERSITY OF MARYLAND.—MEDICAL DEPARTMENT.

Nathan R. Smith, M.D., Professor of Surgery.
Wm. E. Aiken, M.D., Prof. of Chemistry and Pharmacy.
Samuel Chew, M.D., Prof. of Medicine.
G. W. Miltenberger, M.D., Prof. of Obstetrics.
Wm. A. Hammond, M.D., Prof. of Anatomy and Physiology.
Edward Warren, M.D., Professor of Materia Medica.
James H. Butler, M.D., Demonstrator of Anatomy.

Clinical Advantages.—For the purpose of Clinical instruction, the School possesses a capacious hospital of its own.

Fees.—Full course, *ninety dollars;* Practical Anatomy, *ten dollars*. No charge is made for the clinical ticket. A

limited number of students will be permitted to reside in the Infirmary as clinical assistants. The fee is *one hundred dollars* per year, payable in advance. Matriculation fee, $5. Graduation fee, $20.

Graduation.—Candidates for graduation must have attended two courses of Lectures in this school, or one in this, *after* one in some other respectable Medical school. Every candidate must deposit with the Dean of the Faculty, on or before the 14th day of February, a thesis of his own composition on some subject connected with medical science, or a clinical report of not less than six cases of disease, drawn up from his own observation.

MASSACHUSETTS.

HARVARD UNIVERSITY.—MEDICAL DEPARTMENT.

Cornelius C. Felton, LL.D., President.
D. Humphreys Storer, M.D., Prof. Obstet. and Med. Jurisp.
John B. S. Jackson, M.D., Morbid Anatomy.
Henry I. Bowditch, M.D., Clinical Medicine.
Oliver W. Holmes, M.D., Anatomy and Physiology.
George C. Shattuck, M.D., Theory and Practice of Physic.
Henry J. Bigelow, M.D., Surgery.
John Bacon, M.D., University Chemistry.
Edward H. Clarke, M.D., Materia Medica.
David W. Cheever, M.D., Demonstrator of Anatomy.

Clinical Advantages.—Instruction is given at the bedside of the patient in the wards of the Massachusetts General Hospital by the Professor of this branch, who is one of the attending physicians of the Hospital. The Chelsea Hospital, Boston Dispensary, and the Eye and Ear Infirmary are also open to students.

Fees.—Fees for the Lectures at the University, $80; Matriculation fee, $3; Graduation fee, $20.

BERKSHIRE MEDICAL INSTITUTION, PITTSFIELD.

Henry H. Childs, M.D., President, Prof. Med. & Obstetrics.
Timothy Childs, M.D., Prof. of Surgery.
Henry M. Seely, M.D., Prof. of Chemistry and Toxicology.
R. Cresson Stiles, M.D., Prof. of Physiology and Pathology.
Wm. Henry Thayer, M.D., Prof. of Medicine.
William P. Seymour, M.D., Prof. of Materia Medica.
James D. Colt, Esq., Prof. of Medical Jurisprudence.
Corydon L. Ford, M.D., Prof. of Anatomy.
Robert W. Gray, Demonstrator.

The fortieth lecture term commenced on the first Thursday in August, and continues sixteen weeks.

Clinical Instruction.—The numbers of patients coming from a large section of country to seek relief at the medical and surgical cliniques of the College, have rendered the demand for a Hospital in connexion with it imperative. The cliniques are continued throughout the year, and during the lecture term a portion of every Wednesday and Saturday will be devoted to Clinical Instruction. Practical instruction on Auscultation and Percussion will be given by the Professor of Theory and Practice.

The Winter Term.—This Term commences on the first of January and continues until the second Thursday in May, and will be occupied by recitations and familiar lectures and demonstrations.

Graduation.—Degrees are conferred at the close of the lecture term, and at other periods to correspond with the expiration of the term of study prescribed for candidates. The requisites are: three full years of study, under a regular practitioner of medicine; attendance on two full courses of lectures in Medical institutions regularly established, one of which courses must have been attended at this institution; a satisfactory examination; a thesis on some subject connected with medical science. Full and formal certificates of time are required.

Fees.—For all the Courses of Lectures, $50; fee for those who have already attended two full courses at other Medical Schools, $10; Matriculation Ticket, $3. Students of two courses at this Institution pay only the Matriculation fee. Graduation fee, $18; Library fee, $1.

MICHIGAN.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF MICHIGAN, ANN ARBOR.

Rev. Henry P. Tappan, D.D., LL.D., President.
Zena Pitcher, M.D., Prof. Emer. Medicine and Obstetrics.
Abram Sager, M.D., Prof. of Obstetrics.
Silas H. Douglas, M.D., Prof. of Chemistry and Pharmacy.
Moses Gunn, M.D., Prof. of Surgery.
Alonzo B. Palmer, M.D., Prof. of the Th. and Prac. of Med.
Corydon L. Ford, M.D., Prof. of Anatomy.
Hon. T. M. Cooley, Prof. of Medical Jurisprudence.
Samuel G. Armor, M.D., Prof. of Materia Medica.
Alfred Dubois, A.M., Assistant Prof. of Chemistry.
William Lewitt, M.D., Demonstrator of Anatomy.
P. B. Rose, M.D., J. W. Langley, B.S., Assistants in the Chemical Department.

Lecturcs commence on the first day of October, and continue until the last Wednesday in March.

Terms of Admission.—Each candidate for admission must be provided with satisfactory evidence of good moral character; and, if a candidate for graduation, must also possess a good English education, the knowledge of Natural Philosophy, the Elementary Mathematical Sciences, and such an acquaintance with the Latin Language as will enable him to appreciate the technical language of medicine, and to read and write prescriptions. Students are expected to be in attendance upon *the first day of the term*, as the regular course of instruction will commence upon, and continue from that day; *and by the rule adopted, certificates are issued only for the period of actual attendance.*

Graduation.—To be admitted to the Degree of "Doctor of Medicine," the student must exhibit evidence of having pursued the study of Medicine and Surgery for the term of three years with some respectable Practitioner of Medicine (including lecture terms); must have attended two full courses of lectures, the last of which must have been in the College of Medicine and Surgery of the University of Michigan, and the previous one in this or some other respectable Medical Institution; must have been engaged in the study of Practical Anatomy; must be twenty-one years of age; must have submitted to the Faculty a thesis composed and written by himself, on some medical topic, and have passed an examination at the close of the term, satisfactory to the Faculty. An allowance of six months from the term of study is made in favor of graduates of the Department of Science and Arts, and of other respectable Literary Colleges. His final thesis may be written either in English, German, French, or Latin; and if required, must be defended before the Faculty.

Fees.—Matriculation, $10. Incidentals, $5. Tuition, gratuitous. Diploma—for the parchment, filling, &c., $3.

MISSOURI.

ST. LOUIS MEDICAL COLLEGE, ST. LOUIS.

M. L. Linton, M.D., Prof. of Practice of Medicine.
A. Litton, M.D., Prof. of Chemistry and Pharmacy.
Charles A. Pope, M.D., Prof. of Surgery.
M. M. Pallen, M.D., Prof. of Obstetrics.
W. M. McPheters, M.D., Prof. of Materia Medica.
Chas. W. Stevens, M.D., Prof. of Anatomy.
John B. Johnson, M.D., Prof of Medicine and Pathol.
J. H. Watters, M.D., Prof. of Physiology.
E. H. Gregory, M.D., Demonstrator of Anatomy.
L. Dinkler, Curator.

The regular Course of Lectures will commence on the first of November next, and continue until the following March. Preliminary Lectures will be delivered at the College during the month of October, as also Clinical Lectures at the Hospitals and Dispensary.

Practical Anatomy.—The Anatomical rooms will be opened on the first of October, for the benefit of those students who may arrive before the commencement of the regular lectures.

Clinical Instruction.—The following Institutions afford the Faculty ample opportunities for Clinical instruction:—St. Louis Hospital, City Hospital, United States Marine Hospital, St. Louis Lying-in Hospital, and the O'Fallon Clinic and Dispensary.

Graduation.—That the candidate be twenty-one years of age, of good moral character, and has been engaged in the study of Medicine for three years (courses of lectures included). That he shall have attended two courses of lectures in this Institution. Attendance on a regular course in some respectable and generally accredited medical school, or four years of reputable practice, will, however, be considered as equivalent to one of the courses above specified. The Dissecting ticket must also have been taken at least one session in this or some other school. He must also have followed the practice of a Hospital.

That he shall undergo a satisfactory examination on all the branches taught in this College, and write an acceptable thesis, either in the English, Latin, French, or German language, on some subject connected with Medicine. Graduates of other respectable schools are admitted to the Lectures on the payment of the Matriculation fee only.

Fees.—Fees for the whole course, $105. The Matriculating Ticket (paid but once) is $5; that of the Demonstrator, $10. Graduating Fee, $20.

MISSOURI MEDICAL COLLEGE, ST. LOUIS.

John S. Moore, M.D., Theory and Practice of Medicine.
John Barnes, M.D., Materia Medica, Therap. and Med. Bot.
John T. Hodgen, M.D., Anatomy.
E. S. Frazer, M.D., Obstetrics and Diseases of Women.
Joseph N. McDowell, M.D., Surgery and Surg. Anatomy.
Thos. McMartin, M D., Pathology and Clinical Medicine.
G. M. B. Mangles, M.D., Chemistry and Physiology.
L. T. Pimm, M.D., Adjunct of Surgery.
John J. McDowell, M.D., Demonstrator.

Graduation.—Three years' study, including two courses of lectures, or reliable evidence that the applicant has been reputably engaged in practice for three years, and has attended a course of lectures in this institution, will be required of all who wish to graduate.

Fees.—For a full Course of Lectures, $105; for Graduation, $20; for admission to the Dissecting Rooms and Demonstrations, $10; Matriculation fee (paid but once), $5.

NEW HAMPSHIRE.

MEDICAL DEPARTMENT OF DARTMOUTH COLLEGE, HANOVER.

Rev. Nathan Lord, D.D., President.
Hon. Isaac F. Redfield, LL.D., Med. Jurisprudence.
Dixi Crosby, M.D., Surgery and Obstetrics.
Edward E. Phelps, M.D., LL.D., Medicine.
Albert Smith, M.D., Materia Medica and Therapeutics.
Oliver P. Hubbard, M.D., Chemistry and Pharmacy.
Edmund R. Peaslee, M.D., LL.D., Anat. and Physiology.
Henry M. Field, M.D., Demonstrator of Anatomy.

The annual course of lectures commenced Aug. 1st, 1862, and continues fourteen weeks.

Clinical Advantages.—Patients presenting themselves before the class will be operated upon gratuitously. Ample provision has been made for the accommodation of patients after operations, at the Hospital established by Dr. Crosby, where patients are received and treated through the year.

Graduation.—Every candidate for the degree of Doctor of Medicine shall give satisfactory evidence of good moral character, and (unless a college graduate) of a competent knowledge of the Latin language. He shall have attended two full courses of lectures on all the branches of medical science, at some regularly authorized medical school—one of which courses shall have been at this Institution. He shall give satisfactory evidence that he has devoted three full years to his professional studies, under the direction of some regular practitioner—the time spent at lectures being included. He shall prepare and present to the faculty, at least ten days before the examination, a dissertation on some medical subject, which he may be called upon to read and defend at his examination, as the faculty may direct. There are three examinations, viz.—On the Tuesday preceding the second Wednesday in May; on the Tuesday preceding the annual commencement of the college; and at the close of the medical lectures.

Fees.—For the Course, $50; Matriculation (paid but once), $5; Graduating Expenses, $18.

NEW YORK.

COLLEGE OF PHYSICIANS AND SURGEONS.—MEDICAL DEPARTMENT OF COLUMBIA COLLEGE.

Charles King, LL.D., President of Columbia College.
Edward Delafield, M.D., President of Med. Depart.
Alex. H. Stephens, M.D., LL.D., Emer. of Clin. Surg.
Edward Delafield, M.D., Emeritus of Obstetrics.
John Torrey, M.D., LL.D., Emer. of Chemistry.
Joseph Mather Smith, M.D., Materia Medica.
Robert Watts, M.D., Anatomy.
Willard Parker, M.D., Surgery and Surg. Anatomy.
Chandler R. Gilman, M.D., Obstet. and Med. Jurisprud.
Alonzo Clark, M.D., Pathology and Prac. Medicine.
John C. Dalton, Jr., M.D., Physiol. and Micros. Anat.
Samuel St. John, M.D., Chemistry.
Thos. M. Markoe, M.D., Adjunct. Prof. of Surgery.
Henry B. Sands, M.D., Demonstrator of Anatomy.
William H. Draper, M.D., } Prosectors of Surgery.
George F. Shrady, M.D., }
Foster Swift, M.D., Assistant to the Prof. of Obstetrics.
Governeur M. Smith, M.D., Librarian.

The Regular Course of Lectures for the Session of 1862–'63, will commence on Monday, the 20th of October.

Clinical Instruction.—A Surgical Clinic, by Profs. Parker and Markoe, every Monday, at 11 A.M. A Medical Clinic, by Prof. Clark, every Thursday, at 11 A.M. A Surgical Clinic, by Dr. Detmold, every Wednesday, at 2½ P.M. A Clinic for Females, by Dr. Swift, every Friday, at 2½ P.M. Free attendance on all the Hospitals of the city.

Prizes.—Two Prizes are annually awarded by the Faculty, at the College Commencement in March, for the two best Graduating Theses presented during the year, viz.—A First Prize of Fifty Dollars, and a Second Prize of Twenty-five Dollars. *Harsen Prizes.*—Founded by Jacob Harsen, M.D. Three Annual Prizes will be awarded for the three best written Reports of the Clinical Instruction in the New York Hospital, during any four months of the year immediately preceding the Annual Commencement in March, viz.:—A First Prize, consisting of a Gold Medal, worth Fifty Dollars, and One Hundred Dollars in money. A Second Prize, consisting of a Silver Medal, and Fifty Dollars in money; and a Third Prize, consisting of a Bronze Medal, and Twenty-five Dollars in money. *Stevens Prize for* 1863.—Offered by Alexander H. Stevens, M.D., LL.D., Professor Emeritus of Surgery, and Ex-President of the College. This Prize, consisting of the sum of One Hundred Dollars, will be awarded for the best series of Preparations which shall adequately illustrate the Anatomy, Physiology, and Pathology of the Larynx.

Graduation.—There are two periods for conferring degrees: one at the Annual Commencement, in March; the other at the opening of the Regular Course, in October. Candidates for the degree of Doctor of Medicine must have attended two full courses of Lectures,—the latter in this College. They must also have studied medicine three years, under the direction of a regular physician, including the attendance upon lectures; and have attained the age of twenty-one years. Each candidate is required to write a thesis on some subject connected with the science of medicine, and to deposit it with the Secretary of the Faculty. Full and formal certificates of the time of study, of moral character, and of age, must also be furnished. The examination of candidates takes place semi-annually; that for graduation in the Spring, early in March; that for graduation in the Fall, on the second Tuesday in September.

Fees.—Matriculation fee, $5. Full Course of Lectures, $105. Ticket of the Demonstrator of Anatomy, $5. Graduation fee, $30. Students who have attended two full courses in this College, or who, having attended one full course in some regularly established medical school, shall subsequently attend one full course in this College, are admitted to a third course of lectures on paying the matriculation fee only. Graduates of this school are admitted without fee. Graduates of other schools, who have been in practice three years, and Theological Students, are admitted on general ticket by paying the matriculation fee.

UNIVERSITY OF NEW YORK.—MEDICAL DEPARTMENT.

Rev. Isaac Ferris, D.D., LL.D., Chancellor of the University.
Valentine Mott, M.D., LL.D., Emerit. Prof. of Surg., etc.
Martyn Paine, M.D., LL.D., Prof. of Mat. Med. and Therap.
Gunning S. Bedford, M.D., Prof. of Obstetrics.
John W. Draper, M.D., LL.D., Prof. of Chem. and Phys.
Alfred C. Post, M.D., Prof. of Surgery.
William H. Van Buren, M.D., Professor of Anatomy.
John T. Metcalfe, M.D., Professor of Medicine.
J. W. S. Gouley, M.D., Demonstrator of Anatomy.
J. H. Hinton, M.D., } Prosectors of Surgery.
Alexander B. Mott, M.D., }

The Session for 1862–63 will begin on Monday, Oct. 21, and will be continued until the 1st of March.

Clinical Advantages.—1st. *An Obstetric Clinic for the Diseases of Women and Children*, on every Monday, from 2½ to 4½ o'clock P.M., by Prof. Bedford. 2d. *Surgical Clinic* every Tuesday, from 3 to 4½ o'clock P.M., by Prof. Mott. 3d. *Medical Clinic* every Wednesday, from 2½ to 3½ o'clock P.M., by Prof. Metcalfe. 4th. *Surgical Clinic, with the Diseases of the Genito-Urinary Organs*, every Wednesday, from 3½ to 4½ o'clock P.M., by Prof. Van Buren. 5th. *Surgical Clinic* every Saturday, from 11 A.M. to 1 P.M., by Prof. Post. Free attendance on all the Hospitals.

Prizes.—*Mott-Medals.*—These Medals will be given to candidates as follows: One of Gold, one of Silver, one of Bronze. The Gold Medal to the candidate who shall prepare the best dried Anatomical or Anatomico-Surgical preparation. The Silver Medal to the second best of that description. The Bronze Medal to the candidate who shall furnish the best book of recorded cases, and remarks of the Professor, of either of the Surgical Clinics. *Metcalfe Prizes.*—Professor Metcalfe will give two prizes for the first and second reports, in order of merit, of cases occurring at his College Clinics during the session. *Van Buren Prizes.*—The Professor of Anatomy offers two prizes for the best dissections by members of the Dissecting Class, on the recent subject.

Graduation.—The examination for the Degree will commence towards the close of the session, and will be continued daily until all the candidates shall have been examined. The following are the requisites for the diploma. The candidate must be 21 years of age. He must have attended two courses of medical lectures; one of which must have been delivered in the medical department of the University of New York. He must have attended a course of Practical Anatomy in the Dissecting Room. The candidate must have studied medicine for three years (the terms of attending lectures being included in these), under the direction of a respectable medical practitioner. He must write a medical thesis, either in the English, Latin, or French language. Two Commencements take place annually in the University. The first early in the month of March, and the other about the end of June.

Fees.—Full Course of Lectures, $105; Matriculation Fee, $5; Fee for instruction by the Demonstrator, $5; Graduation Fee, $30.

NEW YORK MEDICAL COLLEGE AND CHARITY HOSPITAL.

Horace Green, M.D., LL.D., Emeritus Prof. of Medicine.
John M. Carnochan, M.D., Clin. and Operative Surgery.
Benj. I. Raphael, M.D., Prin. and Prac. of Surgery.
Charles A. Budd, M.D., Theo. and Prac. of Obstetrics.
A. Jacobi, M.D., Infantile Pathol. and Therapeutics.
S. Rogers, M.D., Lecturer on Physiol. and Mic. Anatomy.
E. Noeggerath, M.D., Clin. Mid. and Dis. of Women.
J. V. C. Smith, M.D., Anatomy.
Wm. F. Holcomb, M.D., Ophthalmic and Aural Surg.
Samuel R. Percy, M.D., Materia Medica and Therapeutics.
H. G. Cox, M.D., Theory and Practice of Medicine.
P. H. Van Der Weyde, M.D., Chemistry and Toxicology.
James E. Steele, M.D., Demonstrator of Anatomy.
C. A. Bacon, M.D., Assist. Demonstrator.

The Thirteenth Annual Course of Lectures will commence on the 20th October, 1862, and will continue until the first week of March, 1863.

Clinics at the College.—Mondays and Thursdays, Surgical, by Profs. Raphael and Carnochan. Tuesdays and Fridays, Diseases of Children, by Prof. Jacobi. Tuesdays, Diseases of the Eye and Ear, by Prof. Holcomb. Wednesdays. Diseases of Women, by Profs. Noeggerath and C. A. Budd. Saturdays, Medical, by Prof. Cox. Attendance on all the Hospitals of New York.

Faculty Prizes.—There are annually distributed to the successful competitors among the Graduating Class of this College, two prizes for the best Theses. These prizes were created by the Alumni of the College.

Fees.—Full Course of Lectures, $105. Matriculation Fee, $5. Fee for Demonstrator, $5. Fee for Final Examination, $30. Thirty Dollars are to be paid previous to the final examination, which is irrespective of graduation. In case the candidate is not recommended for the degree of Doctor of Medicine, he will be entitled in six months afterwards to another examination, for which no fee will be exacted. Graduates of three years' standing, of other institutions where the requirements are the same as at this, will be admitted to attend all the lectures on paying the matriculation fee. Two full Courses, one being in this College, will admit to a Third Course on paying Matriculation fee.

Graduation.—Candidates must have attended two full courses of lectures in some regular Medical College, the last of which must be in this College. They must be twenty-one years of age, and have studied medicine for at least three years, under the direction of some regular physician. They must each write a thesis on some professional subject, and deposit it with the Dean, with certificates of age, time of study, good moral character, and proof of having passed their two collegiate courses of instruction. They must also pass a satisfactory examination *before seven of the Faculty.*

BELLEVUE HOSPITAL MEDICAL COLLEGE.

Isaac E. Taylor, M.D., President.
Benjamin W. McCready, M.D., Secretary.
R. Ogden Doremus, M.D., Treasurer.
James R. Wood, M.D., Operative Surgery and Surg. Path.
Frank H. Hamilton, M.D., Military Surgery, Fractures, etc.
Lewis A. Sayre, M.D., Orthopœdic Surgery.
Alexander B. Mott, M.D., Surgical Anatomy.
Stephen Smith, M.D., Principles of Surgery.
Isaac E. Taylor, M.D., } Obstetrics and Diseases of
George T. Elliot, M.D., } Women.
B. Fordyce Barker, M.D., }
Benjamin W. McCready, M.D., Materia Medica and Thera.
Timothy Childs, M.D., Descriptive Anatomy.
Austin Flint, M.D., Practice of Medicine.
* R. Ogden Doremus, M.D., Chem. and Toxicology.
Austin Flint, Jun., M.D., Physiol. and Microscopic Anat.
Charles D. Phelps, M.D., Demonstrator of Anatomy.
N. R. Moseley, M.D., Prosector to Chair of Surgical Anat.
Sylvester Teats, M.D., Prosector of Surgery.
A. A. Shiverick, M.D., Clinical Assistant.

Clinical Advantages.—The College, being a part of Belle-

* Dr. Doremus being absent in Europe, his chair will be filled during the term by Prof. B. Silliman, Jun., of Yale College.

vue Hospital, offers every possible facility for clinical study of every variety of disease.

Prizes are offered by two members of the Faculty, Professors Wood and Mott, for the best preparations relating to Surgical Anatomy, to be competed for by students in any of the Medical Schools of New York and Brooklyn. The prizes offered by Prof. Wood are $50, and a diploma, for the best preparation, and $25 with a diploma, for the one ranking second in excellence. The prize offered by Prof. Mott is a complete case of surgical instruments of the value of $100, for the best preparation.

The *regular term* will commence on Wednesday, Oct. 15th, 1862, and end early in March, 1863.

Graduation.—The requirements for graduation in this College are—twenty-one years of age; three years' study with a regular and respectable practitioner of medicine (or practitioners), inclusive of the time of attendance at medical lectures; attendance on two full courses of lectures, the last being in this College; proper testimonials of character; an acceptable thesis in the handwriting of the candidate, and a satisfactory examination in each of the departments of instruction. Candidates for graduation will be examined in Surgery and Obstetrics respectively, by one of the Professors appointed in each of these departments.

Fees.—Full course, $105. Matriculation fee, $5; Graduation fee, $30; Demonstrator's ticket, $5. Students who have attended two full courses of lectures in other accredited schools will be admitted to all the lectures for $50. Students who may attend two full courses in this College, or who attend one full course in this College, and have attended one full course in some other accredited school, will be required to matriculate only.

The students attending the various Colleges of N. York city are entitled to free attendance upon the following institutions. *Hospitals*—N. Y. Hospital, 319 Broadway; Bellevue Hospital, 26th street, E. R.; Blackwell's Island Hospital, E. R.; Emigrant Hospital, Ward's Island; Nursery Hospital, Randall's Island; Child's Hospital, 51st street; N. Y. Eye Infirmary, 2d Avenue and 13th street, N. Y.; Ophthalmic Hospital, 28th street and 4th Avenue. *Dispensaries.*—N. York Dispensary; Eastern, Northern; North Western; Demilt, and North Eastern.

LONG ISLAND COLLEGE HOSPITAL, BROOKLYN.

Austin Flint, M.D., Practical Medicine and Pathology.
Franklin H. Hamilton, M.D., Surgery.
James D. Trask, M.D., Obstetrics.
R. Ogden Doremus, M.D., Chemistry and Toxicology.
Joseph D. Hutchison, M.D., Surg. Anat. and Operat. Surg.
John C. Dalton, M.D., Physiology and Microscopic Anat.
DeWitt C. Enos, M.D., Anatomy.
Edwin M. Chapman, M.D., Mat. Med. and Therapeutics.
J. G. Johnson, M.D., Demonstrator.

Regular lectures commence about the middle of March, and continue sixteen weeks.

Clinical Instruction.—Brooklyn City Hospital, one of the finest and best appointed in the country, is open to medical men and students without charge. There are also dispensaries open to the students.

Graduation.—The candidate for graduation must have studied Medicine for three years under the direction of a regular practitioner, must be twenty-one years of age, of good moral character, have attended two full courses of lectures, of which one must be at this institution, and submit to the faculty a thesis in his own handwriting on some medical subject.

Fees.—Fees for the whole course, including Matriculation fee, $100; Single tickets (exclusive of Matriculation fee of $5) each, $12 50; Graduation fee, $20; Demonstrator's ticket, $5; Hospital tickets, gratuitous. Regular physicians will be admitted to all the lectures on payment of $5 (the amount of the Matriculation fee).

GENEVA MEDICAL COLLEGE.

John Towler, M.D., Chemistry and Pharmacy.
James Hadley, M.D., Emeritus of Chemistry.
Frederick Hyde, M.D., Principles and Practice of Surgery.
George Burr, M.D., General and Special Anatomy.
Welson Nivison, M.D., Physiology and Pathology.
Hiram N. Eastman, M.D., Practice of Med. and Mat. Med.
R. Stone, M.D., Professor of Obstetrics,
Lyman W. Bliss, M.D., Demonstrator of Anatomy.

The session of 1862–3 began on Wednesday, the 1st day of October, 1862, and will continue sixteen weeks.

Graduation.—The candidate for the medical degree must be twenty-one years of age, of good moral character, have attended two full courses of medical lectures, the last at this institution, and must exhibit satisfactory evidence of having prosecuted the study of medicine for three years under the direction of some respectable physician. He must also undergo an examination by the professors, in their respective branches, in the presence of the Board of Curators, and present—and defend when required—a dissertation on some medical subject, composed and written by himself.

Fees, payable in advance.—Matriculation, $3. Tickets for the whole Course, $50. Graduation, $20. Demonstrator's Ticket, $3. Anatomical Material, $5.

ALBANY MEDICAL COLLEGE.

Alden March, M.D., Principles and Practice of Surgery.
James McNaughton, M.D., Theory and Practice of Med.
James H. Armsby, M.D., Descriptive and Surgical Anat.
Howard Townsend, M.D., Materia Med. and Physiology.
Charles H. Porter, M.D., Chem. and Med. Jurisprudence.
J. V. P. Quackenbush, M.D., Obstetrics.
F. L. R. Chapin, M.D., Demonstrator of Anatomy.

The Annual Course of Lectures at this Institution commenced on the first Tuesday of September, 1862, and continues sixteen weeks. Degrees are conferred at the close of the term, and also in June.

Clinical Advantages.—The Saturdays of every week are devoted to surgical operations and clinical instruction, and in this way the students have an opportunity of witnessing a great variety of medical and surgical cases. A large and commodious Hospital has been established nearly opposite the College, provided with a spacious Lecture Room, Dispensary, and every requisite for the study of Clinical Medicine and Surgery, to which students are admitted, free of charge.

Graduation.—The candidate must be twenty-one years of age, and exhibit certificates from a physician or surgeon duly authorized by law to practise his profession, that he has studied medicine and surgery under his instruction during a term of three years. He must have attended two full courses of lectures, the last of which at this Institution. He must deliver to the Registrar, six weeks before the end of the term, a thesis, written by himself, on some medical subject, and be prepared to defend it at his examination. He must pass a satisfactory examination on the several branches of medicine and surgery. The Graduation fee is $20, which must be paid to the Registrar before the candidate can be admitted to an examination.

Fees.—The matriculation fee is $5. The fees for a full Course, $65. Perpetual ticket, $110.

UNIVERSITY OF BUFFALO.—MEDICAL DEPARTMENT.

Charles B. Coventry, M.D., Emeritus Prof. of Physiology.
James P. White, M.D., Prof. of Obstetrics.
George Hadley, M.D., Prof. of Chem. and Pharmacy.
Thomas F. Rochester, M.D., Prof. of Medicine.
Edward M. Moore, M.D., Prof. of Surgery.
Sandford Eastman, M.D., Prof. of Anatomy.
Joshua R. Lothrop, M.D., Lecturer on Materia Medica.
William H. Mason, M.D., Prof. of Phys. and Micros. Anat.
Charles P. Fanner, M.D., Demonstrator of Anatomy.

The Annual Course of Lectures in this Institution commences on the first Wednesday in November, and continues sixteen weeks. The Dissecting Rooms will be opened on the second Wednesday in October.

Clinical Advantages.—Clinical Lectures at the Buffalo Hospital throughout the entire terms, by Professors Moore and Rochester.

Fees.—The fees for the tickets of all the Professors, inclusive of the hospital ticket, amount to $70. Matriculation fee (annually), $5. Students who have attended a full course of lectures in this or in any other institution, will be received on payment of $50. The fee for those who have attended two courses elsewhere is $25. The Alumni of this College, and all who have attended two full courses at the institution, are entitled to all the tickets on payment of the Matriculation fee of $5. Graduation fee, $20. Graduates of any respectable college, after three years, will receive all the tickets on payment of the matriculation fee. Practitioners of five years' standing, who have attended one course of lectures in a respectable institution, will be received for $25. The fee for the ticket of the Demonstrator of Anatomy, is $5, which is optional, except for one term before graduation.

OHIO.

MEDICAL COLLEGE OF OHIO.

M. B Wright, M.D., Prof. of Obstetrics.
Geo. C. Blackman, M.D., Professor of Surgery.
James Graham, M.D., Prof. of Practice of Medicine.
W. W. Dawson, M.D., Prof. of Anatomy.
Jas. F. Hibberd, M.D., Prof. Physiology and Pathology.
J. C. Reeve, M.D., Professor of Materia Medica.
Charles O'Leary, M.D., Prof. of Chemistry and Toxicology.
John S. Billings, M.D., Demonstrator of Anatomy.
Charles Thornton, M.D., Prosector to Professor of Surgery.

The regular course of lectures will commence on the 21st day of October and continue until the 1st of March.

Clinical Advantages.—Clinical Lectures will be delivered at the Commercial, St. John's, and St. Mary's Hospitals. The Hospital Ticket is $10, but is included in the Professors' tickets.

Graduation.—Three years' study, under the guidance of a reputable instructor; attendance upon two full courses of lectures, the last in this Institution. Graduates of the school will be admitted free to all the lectures. The graduates of other schools will be required to pay the Matriculation and Hospital tickets. The President of the Ohio State Medical Society, with other physicians whom he may select, will be present by invitation of the faculty, at the final examination of the candidates.

Fees.—Matriculation fee (paid once only), $5; Professors' Tickets, including Hospital, $105; Demonstrator's Ticket, $6; Graduation fee, $25.

CLEVELAND MEDICAL COLLEGE.

John Delamater, M.D., LL.D., Emeritus Prof. of Obstet.
Jared P. Kirtland, M.D., Prof. of the Prin. and Pr. of Med.
J. Lang Cassels, M.D., LL.D., Prof. of Chem. and Toxicol.
Proctor Thayer, M.D., Prof. of Anatomy and Physiology.
Gustave C. E. Weber, M.D., Prof. of Surgery.
H. K. Cushing, M.D., Prof. of Midwifery and Med. Jurisp.
Alleyne Maynard, M.D., Prof. of Mat. Med. and Therap.
John E. Darby, M.D., Demonstrator of Anatomy.

The next Annual Course of Lectures will commence on the first Wednesday of November, and continue sixteen weeks. The Lectures are so arranged that six are given daily.

Clinical Advantages.—Wednesdays are devoted to Medical and Surgical Cliniques.

Fees.—The fee for the tickets of all the Professors is $60. Medical graduates, and those who have attended two full Courses at this Institution, are entitled to free admission to all the Lectures, by paying the matriculation fee only.

Graduation.—The candidate for the degree of Doctor of Medicine must have pursued medical studies for three years, attended two full courses of medical lectures—the last of which must have been at this Institution—one course of practical anatomy, and composed and deposited with the Treasurer a satisfactory thesis on some medical subject, together with the sum of twenty dollars as a graduating fee—the thesis and graduating fee to be returned to him, in case he fail of obtaining the degree. He must also produce satisfactory testimonials of good moral character, and sustain an examination by the Professors, a majority of the votes given in a joint ballot being necessary to his recommendation for a degree. Bachelors of Arts may be graduated after two years' membership. Gentlemen who have been reputably engaged in the practice of medicine for four years, may be admitted to an examination for the degree, after having attended a single course of lectures—the practice having preceded the lectures—provided only that all other pre-requisites have been complied with.

STARLING MEDICAL COLLEGE, COLUMBUS.

S. M. Smith, M.D., Prof. of Theory and Practice.
Francis Carter, M.D., Prof. of Obst. and Dis. of Wo. and Ch.
John Dawson, M.D., Prof. of Anatomy and Physiology.
J. W. Hamilton, M.D., Prof. of Surgery.
S. Loving, M.D., Prof. of Mat. Med. Therap. and Med. Jur.
Theo. G. Wormley, M.D., Prof. of Chemistry and Toxicology.
R. N. Barr, M.D., Demonstrator of Anatomy.

The next session of Starling Medical College will commence on Thursday the 16th of October, 1862, and will continue until the 1st of March, 1863.

Clinical Advantages.—Clinical lectures on Wednesdays and Saturdays by the Professors of Surgery and Practice at the College, and at the Hospital of the County Infirmary.

Graduation.—Three full years' study with some respectable practitioner of medicine, including lectures; attendance upon two full courses of medical lectures, in respectable medical Institutions, regularly established, one of which shall be in this Institution; attendance upon at least one course of practical dissections; a thesis upon some medical or surgical subject, of the student's own composition and writing, which must be read and defended when called for; and the passing successfully an examination before the Faculty and Officers of the Institution. Regular medical graduates, clergymen, and theological students, and who have already attended two courses of lectures at this Institution, will be admitted to the lectures on the payment of the matriculation fee.

Fees.—Tickets of all the Professors, $60. Matriculation Ticket (paid but once), $5. Graduation Fee. $20. Tickets for the privileges of the Dissecting Room, including the services of the Demonstrator, $8.

CINCINNATI COLLEGE OF MEDICINE AND SURGERY, CINCINNATI.

P. M. Crume, M.D., Emeritus Prof. of Obstetrics.
A. H. Baker, M.D., Prof. of Surgery.
B. S. Lawson, M.D., Prof. of Medicine and Pathology.
G. R. Chitwood, M.D., Prof. of Materia Medica.
J. H. Tate, M.D., Prof. of Obstetrics.
Daniel Vaughn, A.M., M.D., Prof. of Chemistry.
W. P. Thornton, M.D., Prof. of Anatomy and Physiology.
Conrad Soellheim, M.D., Demonstrator of Anatomy.

The regular course in this institution commences on the 14th of October, and closes on the last week in February Students are allowed to tend, without charge, the Commercial Hospital.

Graduation.—The student, before matriculating, must give satisfactory evidence of having acquired a good English education; this may be done by the certificate of his teacher, or by his own composition at the time of matriculation. The candidate must give evidence of good moral

character, and must be at least twenty-one years of age. He must have attended two full courses of lectures in some respectable Medical School, one of which shall have been in this College, and must exhibit his tickets, or other satisfactory evidence thereof, to the President of the Faculty. He must have studied medicine not less than three years, with a respectable practitioner—practised dissection and attended clinical instruction at least one session. He must present to the President of the College, a thesis of his own composition, on some medical subject; and, at his final examination, exhibit to the faculty satisfactory evidence of his professional attainments. He must, before he receives the degree, acknowledge the right of the faculty to revoke it, should he engage in quackery, or be guilty of gross unprofessional conduct. Four years' practice will be considered as equivalent to attendance on one course of lectures, a certificate of which must be presented at the time of matriculating, or handed in with the thesis. The *ad eundem* degree will be conferred on graduates of other respectable Colleges, upon passing a satisfactory examination, paying the Graduation fee, and the presentation of evidence of a good moral and professional character.

Fees.—Professors' Tickets free; Matriculation, $25; Demonstrator's Ticket, $5; Hospital Ticket, $5; Graduation, $25.

PENNSYLVANIA.

UNIVERSITY OF PENNSYLVANIA.—MEDICAL DEPARTMENT.

William Gibson, M.D., Emeritus Professor of Surgery.
George B. Wood, M.D., Emeritus Professor of Medicine.
Samuel Jackson, M.P., Professor of Institutes of Medicine.
Hugh L. Hodge, M.D., Professor of Obstetrics.
Joseph Carson, M.D., Professor of Materia Medica.
Robert E. Rogers, M.D., Professor of Chemistry.
Joseph Leidy, M.D., Professor of Anatomy.
Henry H. Smith, M.D., Professor of Surgery.
William Pepper, M.D., Professor of Medicine.
William Hunt, M.D., Demonstrator of Anatomy.
C. S. Bishop, M.D., Edward Shippen, M.D., } Surgical Demonstrators.

The session for the Medical Lectures begins early in October, and ends early in March ensuing.

Clinical Advantages.—Attendance on the Medical and Surgical Clinics of the College, the Pennsylvania and Philadelphia Hospital, and the several Infirmaries.

Graduation.—The following are the rules in force in relation to the degree of Doctor of Medicine:—The candidate must have attained the age of twenty-one years, have applied himself to the study of medicine for three years, and been, during that time, the private pupil for two years, at least, of a respectable practitioner of medicine; the candidate must also have attended two complete courses of the following lectures in this Institution:—theory and practice of medicine; anatomy; materia medica and pharmacy; chemistry; surgery; obstetrics, and the diseases of women and children; institutes of medicine. Medical students who have attended one complete course in a respectable medical school, where the attendance on two complete courses is necessary to a degree, where the same branches are taught as in this, and which is placed upon the *ad eundem* of this school, are permitted to become candidates by an attendance here for one full course; the rules of graduation being in other respects observed. They are also exempted from the payment of fees upon attending a second term. The candidate, at the time of his application, must deliver to the Dean of the medical faculty a thesis on some medical subject. When a candidate is rejected, his essay will be retained by the medical faculty. Bad spelling in a thesis, or evidences of a want of literary culture, will preclude a candidate from examination for a degree. The voting on the case of each candidate is by ballot. Candidates who have not been successful upon a first examination, will be permitted to have a second, when all the classes have been disposed of by the faculty. The second examination will be conducted in full meeting of the Professors. Graduates of medical schools, on the *ad eundem* list, by attending one complete course in this Institution, and complying with the above regulations, are put upon the same footing with students who have attended two complete courses here. Such graduates, if of five years' standing, are permitted to attend the course of lectures, upon a general ticket of admission, free of expense, except the cost of the matriculating ticket. But this general ticket does not qualify for graduation.

Fees.—Fees for the Course of Lectures, $105; Matriculation Fee (paid only once), $5; Graduating Fee, $30.

JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

Robert M. Huston, M.D., Emeritus Prof. of Mat. Med.
Charles D. Meigs, M.D., Emeritus Prof. of Obstetrics.
Robley Dunglison, M.D., Prof. of Institutes of Medicine, etc.
Joseph Pancoast, M.D., Prof. of Surgical Anatomy.
Franklin Bache, M.D., Prof. of Chemistry.
Samuel D. Gross, M.D., Prof. of Surgery.
Thomas D. Mitchell, M.D., Prof. of Materia Medica.
S. Henry Dickson, M.D., Prof. of Practice of Medicine.
— — Prof. of Obstetrics.
Ellerslie Wallace, M.D., Demonstrator of Astronomy.

The next session of the Jefferson Medical College will commence on the second Monday, being the 13th day of October. The regular lectures will begin the day after. The session will terminate on the last day of February.

Clinical Advantages.—The General Dispensary of the College, which the students of the College have the exclusive privilege of attending gratuitously, will be in active operation from the commencement of September. The College Clinic, connected with this, affords admirable opportunities for the student to learn the practical parts of his profession. The clinic is richly supplied with medical and surgical cases. For certain cases, the faculty have provided hospital accommodations in a building in immediate connexion with the College—thus enabling the surgeons to perform not only the minor, but the more serious operations, as lithotomy, amputation, etc., before the class, without risk to the patient. Free attendance at the Pennsylvania Hospital and the Philadelphia Hospital. Professor Pancoast is one of the surgeons of the former; and Prof. Gross of the latter.

Graduation.—The candidate must be of good moral character, and at least twenty-one years of age. He must have attended two full courses of lectures in some regular and respectable medical school, one of which shall have been in this College, and must exhibit his tickets, or other adequate evidence thereof, to the Dean of the faculty. He must have studied medicine for not less than three years, and have attended at least one course of clinical instruction in an institution approved by the faculty. He must present to the Dean of the faculty a thesis of his own composition, correctly written, and in his own handwriting, on some medical subject; and exhibit to the faculty, at his examination, satisfactory evidence of his professional attainments. If, after examination for a degree, the candidate, on ballot, shall be found to have received three negative votes, he shall be entitled to a fresh examination.

Fees.—The fee to each member of the faculty is $15, payable in advance, making in the whole, $105; the Matriculation fee is $5, to be paid the first session only; the fee for the diploma is $30.

UNIVERSITY OF VERMONT.—MED. DEPARTMENT, BURLINGTON.

Rev. Calvin Pease, D.D., President.
Samuel White Thayer, Jr., M.D., Prof. of Anatomy.
Walter Carpenter, M.D., Prof. of the Theory and Practice of Medicine and Materia Medica.
David S. Conant, M.D., Prof. of Surgery.
Joseph Perkins, M.D., Prof. of Obstetrics.
Edward Hungerford, A.M., Prof. of Chemistry.
R. Cresson Stiles, M.D., Prof. of Phys. and Pathol.

The next annual course of lectures will commence the last Thursday, being the 22d February, and will be continued until Wednesday, June 6th.

Graduation.—There are two periods for conferring degrees; one, at the close of the annual course of lectures in June, the other at the close of the annual term of private instruction in Burlington. Candidates must have attended two full courses of lectures, one in this Institution—must have studied medicine three years with a regular physician, and have attained the age of twenty-one years. Each candidate is required to write a thesis upon some subject connected with the Science of Medicine, and deposit it with the Dean. Full and formal certificates of age, term of study, and of moral character, must be furnished.

Clinical Advantages.—On Saturday of each week a medical and surgical clinique will be held at the Medical College.

Fees.—At the commencement of the session, every student is required to take the Matriculation Ticket. Matriculation fee, $3; Dean's Certificate (entitling the holder to the Tickets of each Professor), $50; Graduation fee, $18. Students who have attended two full courses in other regular Medical Institutions, will be admitted upon payment of the Matriculation fee, and a fee of $10. Graduates of this and other regular Medical Schools are invited to attend the lectures free of charge.

*WASHINGTON (DISTRICT OF COLUMBIA).

NATIONAL MEDICAL COLLEGE, WASHINGTON.

T. Miller, M.D., Emerit. Prof. Anat. and Phys. and Con. S.
James J. Waring, M.D., Prof. of Obst. and Dis. of Women.
John G. F. Holston, M.D., Principles and Prac. of Surg.
John C. Riley, M.D., Prof. of Mat. Med., Ther., and Hygiene.
Nathan Smith Lincoln, M.D., Anatomy and Physiology.
Robert King Stone, M.D., Clinical Surgery.
A. T P. Garnet, Clinical Medicine.
George M. Dove, M.D., Practice of Medicine.
George B. Schaffer, M.D., Chemistry.
Wm. E. Waters, M.D., Demonstrator of Anatomy.

Clinical Instruction.—The Faculty have adopted regular daily clinics at the bedside of patients.

Graduation.—The requisites for graduating are, that the candidate shall have attended the lectures of each professor two full courses, or one full course in this school, and one full course in some other respectable institution. He must have a fair moral character, and he shall have dissected during at least one session. He shall deliver an inaugural dissertation upon some medical subject, and pass a satisfactory examination. All persons who have attended two full courses of lectures in this school are entitled to attend succeeding courses free of expense.

Fees.—The entire expense for a full course of lectures by all the professors, $90; single tickets, $15; Practical Anatomy, by the demonstrator, $10; Matriculating Fee, payable only once, $5; Graduating expenses, $25. No charge made for clinical lectures.

ARMY AND NAVY.

REGULATIONS FOR ADMISSION AND PROMOTION IN THE MEDICAL DEPARTMENT OF THE ARMY.

Boards of Medical Examiners are not convened at stated times, but whenever, in the opinion of the Surgeon-General and Secretary of War, the wants of the service render it necessary. Their meetings are usually held in New York or Philadelphia, which points have generally proved the most convenient for a majority of the applicants; but they may be, and have been, held in Richmond, Newport, Ky., St. Louis, and other places, at the option of the Secretary of War. These Boards are governed in their proceedings by the Regulations for the Army, so far as applicable, but establish their own *modes* of examination.

* Circular not received.

It is the practice first to ascertain whether the candidate is subject to any infirmity or disease, mental or physical, which would in any way disqualify him for performing efficiently the active and arduous duties of a medical officer. If the result be satisfactory, the professional examination follows; if unsatisfactory, the candidate is furnished with a certificate of the fact. The professional examination embraces Anatomy and Physiology, Principles and Practice of Surgery, Obstetrics, Materia Medica and Therapeutics, Chemistry, Medical Jurisprudence and Toxicology. General literary and scientific acquirements are essential; but no positive standard or limit in that particular has been established.

"An Act of Congress, Approved June 30, 1834."

Sec. 1. That from and after the passing of this Act, no person shall receive the appointment of Assistant-Surgeon in the army of the United States, unless he shall have been examined and approved by the Army Medical Board, to consist of not less than three Surgeons or Assistant-Surgeons, who shall be designated for that purpose by the Secretary of War; and no person shall receive the appointment of Surgeon in the army of the United States, unless he shall have served at least five years as an Assistant-Surgeon, and unless, also, he shall have been examined by an Army Medical Board, constituted as aforesaid.

Sec. 2. That the Surgeons in the army of the United States shall be entitled to receive the pay and emoluments of a Major; and the Assistant-Surgeons, who shall have served five years, shall be entitled to receive the pay and emoluments of a Captain; and those who shall have served less than five years, the pay and emoluments of a First Lieutenant; and that said Assistant-Surgeons shall be entitled to receive the same allowance for forage as they are at present entitled to.

Sec. 3. That every Surgeon and Assistant-Surgeon, who shall have served faithfully ten years in these grades, respectively, shall be entitled to receive an increase of rations per day, equal to the number of rations to which he may be entitled under this Act.

No person can receive the appointment of Assistant-Surgeon in the army of the United States unless he shall have been examined and approved by an Army Medical Board, to consist of not less than three Surgeons or Assistant-Surgeons, to be designated for that purpose by the Secretary of War; nor can any person receive the appointment of Surgeon in the Army of the United States unless he shall have served five years as an Assistant-Surgeon, and unless, also, he shall have been examined by an Army Medical Board, constituted as aforesaid.

Boards of Medical Examiners are convened at such times as the wants of the service render it necessary, when selections are made by the Secretary of War of the number of applicants to be examined for the appointment of Assistant-Surgeon. To the persons thus selected invitations are given to present themselves to the Board for examination. These invitations state the time and place of meeting of the Board.

Applicants must be between twenty-one and twenty-five years of age. The Board will scrutinize rigidly the moral habits, professional acquirements, and physical qualifications of the candidates, and report favorably in no case admitting of a reasonable doubt.

The Board will report the respective merits of the candidates in several branches of the examination, and their relative merit from the whole; agreeably whereto, if vacancies happen within two years thereafter, they will receive appointments and take rank in the Medical Corps.

An applicant failing at one examination may be allowed a second, after two years, but never a third.

Applications must be addressed to the Secretary of War; must state the residence of the applicant, and the date and place of his birth. They must also be accompanied (reference will receive no attention) by respectable testimonials of his possessing the moral and physical qualifications re-

quisite for filling creditably the responsible station, and for performing ably the arduous and active duties of an officer of the Medical Staff.

No allowance is made for the expenses of persons undergoing these examinations, as they are indispensable prerequisites to appointment; but those who are approved and receive appointments will be entitled to transportation on obeying their first order.

The pay and emoluments of Surgeons and Assistant-Surgeons are as follows:

Assistant-Surgeon under five years' service.—Pay per month, $53 33; number of rations per day, 4; amount of rations per month, $36; number of horses for which forage is allowed, 1; amount for forage per month, $8. *Servants.*—Number for which pay is allowed, 1; amount allowed for pay per month, $12; amount allowed for clothing per month, $2 50; amount allowed for rations per month, $9; total amount allowed per month, $23 50; aggregate amount receivable, $120 83.

Assistant-Surgeon, over five years' service.—Pay per month, $70; number of rations per day, 4; amount of rations per month, $36; number of horses for which forage is allowed, 1; amount of forage per month, $8. *Servants.*—Number for which pay is allowed, 1; amount allowed for pay per month, $12; amount allowed for clothing per month, $2 50; amount allowed for rations per mouth, $9; total amount allowed per month, $23 50; aggregate amuunt receivable, $137 50.

Assistant-Surgeon, over ten years' service.—Pay per month, $70; number of rations per day, 8; amount of rations, per month, $72; number of horses for which forage is allowed, 1; amount for forage per month, $8. *Servants.*—Number for which pay is allowed, 1; amount allowed for pay per month, $12; amount allowed for clothing per month, $2 50; amount allowed for rations per month, $9; total amount allowed per month, $23 60; aggregate amount receivable, $173 50.

Surgeon, under ten years' service.—Pay per month, $80; number of rations per day, 4; amount of rations per month, $36; number of horses for which forage is allowed, 3; amount for forage per month, $24. *Servants.*—Number for which pay is allowed, 2; amount allowed for pay per month, $24; amount allowed for clothing per month, $5; amount allowed for rations per month, $18; total amount allowed per month, $47; aggregate amount receivable, $187.

Surgeon, over ten years' service.—Pay per month, $80; number of rations per day, 8; amount of rations per month, 72; number of horses for which forage is allowed, 3; amount for forage per month, $24. *Servants.*—Number for which pay is allowed, 2; amount allowed for pay per month, $24; amount allowed for clothing per month, $5; amount allowed for rations per month, $18; total amount allowed per month, $47; aggregate amount receivable, $223.

The allowance for forage and servants is only paid to the Surgeons and Assistant-Surgeons when they actually employ and keep in service the number of servants and horses charged for.

In addition to the above, Surgeons and Assistant-Surgeons are allowed an additional ration per day after the termination of every five years' service.

REGULATIONS FOR ADMISSION AND PROMOTION IN THE MEDICAL DEPARTMENT OF THE NAVY.

It is prescribed by law that no person shall be appointed in this branch of the service who has not been examined and found qualified by a Board of Naval Surgeons, designated by the Secretary of the Navy.

A Board of Naval Surgeons will be assembled annually, at such place as may be indicated by the Department, usually about the close of the lecture season of the colleges, for the examination and selection of candidates for admission into the Medical Corps of the Navy, as well as for the examination of Assistant-Surgeons who may be candidates for promotion.

Application for permission to attend the examination for admission to the Medical Corps of the Navy must be addressed to the Secretary of the Navy, stating the age and residence of the applicant, and be accompanied by respectable testimonials of his possessing the moral and physical qualifications requisite for filling creditably the responsible position of a Medical Officer of the Navy.

The application of no one will be considered who is under twenty-one or over twenty-five years of age.

The permission will state the time and place of the meeting of the Board.

The Board rigidly scrutinizes the physical qualifications of each candidate, as well as his moral, mental, and professional fitness for the naval service; and reports favorably upon no case admitting of a reasonable doubt, as the health and lives of the officers and men of the navy are objects too important to be intrusted to ignorant or incompetent persons.

The Board reports the relative merit of the candidates as shown by the examination; and appointments will be made in the navy as vacancies may occur, in the order in which they may be reported by the Board.

No qualified condition will be held over for appointment beyond one year; if not appointed within that time, it will be necessary for the candidate to be re-examined, when he will take position with the class last examined.

Physical examination will precede the professional; no candidate, not physically qualified for the active duties of the service, will be examined professionally. The Board will make a separate report, in each case, of the physical condition, *direct* to the Department, to be placed on file with the testimonials of the candidate.

No allowance is made for the expenses of persons undergoing these examinations, as they are indispensable prerequisites to appointment.

After five years' service in the navy, at least two years of which shall have been passed "on board a public vessel of the United States at Sea," Assistant-Surgeons shall be entitled to an examination for promotion.

In order that the relative position of Assistant-Surgeons of the same date, who shall be examined for promotion at different times, may be more readily determined, a majority of the members of the Board will be selected, if practicable, from those who served on the next preceding Board.

Assistant-Surgeons, who are candidates for promotion, shall present to the board testimonials of correct deportment and habits of industry from the Surgeons with whom they have been associated on duty; also, a journal of practice, or case-book, in their own handwriting. They are expected to be familiar with the details of duty specified in the "Instructions for the Government of Medical Officers."

Any Assistant-Surgeon who shall fail to present himself for examination after he has been ordered (unless for reasons which may be satisfactory to the Department), or who, after examination, shall be reported by the Board as "not qualified" for promotion, shall be dropped from the list of officers of the Navy.

The pay of Assistant-Surgeons and Surgeons is established by Act of Congress, approved March 3, 1835, and is as follows:

Assistant-Surgeons.—Waiting orders, $650; at sea, $950; after passing and found qualified for promotion to Surgeon, $850; at sea, $1,200; when stationed at navy yards, hospitals, rendezvous, and receiving ships, $950; after being passed, and stationed as above, $1,150.

Surgeons.—For the first five years after the date of his commission, $1,000; for the second five years, $1,250; for the third five years, $1,400; for the fourth five years, $1,600; after he shall have been commissioned as a Surgeon twenty years and upwards, $1,800.

All Surgeons of the navy under orders for duty at navy yards, receiving vessels, rendezvous, or naval hospitals, shall have an increase of one-fourth of the foregoing

amount of their respective annual pay, from the date of their acceptance of such orders.

All Surgeons of the navy ordered to any of the ships or vessels of the United States commissioned for sea service shall have an increase of one-third of the foregoing amount of their respective annual pay, from the date of their acceptance of such orders.

All Surgeons of the navy, ordered as Fleet Surgeons, shall have an increase of one-half of their respective annual pay, from the date of their acceptance of such orders.

In addition to the above, Surgeons and Assistant-Surgeons are allowed one ration per day when attached to vessels for sea service, and ten cents per mile for travelling expenses, if under orders of the Department.

MEDICAL SOCIETIES OF NEW YORK.

New York Academy of Medicine.—Dr. James Anderson, President. Dr. J. H. Hinton, Secretary.

This Society meets on the first and third Wednesdays of each month, in the Chapel of the University Buildings, Washington Square.

New York Pathological Society.—Dr. T. C. Finnell, President. Dr. Geo. F. Shrady, Secretary.

Meetings of this Society are held at the College of Physicians and Surgeons, on the 2d and 4th Wednesdays of each month, at 8 P.M.

Section of Surgery, Academy of Medicine.—Dr. J. R. Wood, President. Dr. J. P. Garrish, Secretary.

The Section meets at the house of Dr. Jas. R. Wood, 2 Irving Place, at 8 P.M., on the fourth Friday of each month.

Obstetric Section, Academy of Medicine.—Dr. S. D. Hubbard, President. Dr. M. G. Porter, Secretary.

Meets at the house of the President, on the 1st and 3d Mondays of the month, at 8 P.M.

Medical and Surgical Society.—Dr. T. M. Halsted, President. Dr. W. H. Draper, Secretary.

This Society meets at the houses of the different members, and is not of a public character. The meetings are held on the 1st and 3d Saturday evenings, at 8 P.M.

Medico-Chirurgical College.—A President is selected at each meeting. The sessions are held twice a month, at the houses of the members. Attendance is always limited to invitations.

New York County Medical Society.—Dr. A. Underhill, President. Dr. Guido Furman, Secretary.

Meetings are held at the College of Physicians and Surgeons.

HOSPITALS OF NEW YORK.

NEW YORK HOSPITAL, 319 BROADWAY.

Clinical Instruction daily at half-past one P.M.

Surgical Clinic, *Monday, Tuesday, Thursday, and Friday.*

Medical Clinic, *Wednesday and Saturday.*

Physicians.—Joseph M. Smith, M.D.; Henry D. Bulkley, M.D.; John H. Griscom, M.D.; Thomas F. Cock, M.D.; T. B. Dash, M.D.; W. H. Draper, M.D.

Surgeons.—Gurdon Buck, M.D.; John Watson, M.D.; Thaddeus M. Halsted, M.D.; T. M. Markoe, M.D.; Willard Parker, M.D.; G. A. Peters, M.D.

BELLEVUE HOSPITAL, 26TH STREET, E. R.

Clinical Instruction daily at half-past one P.M.

Physicians.—A. Clark, M.D.; B. W. McCready, M.D.; I. E. Taylor, M.D.; G. T. Elliot, M.D.; B. F. Barker, M.D.; A. L. Loomis, M.D.; J. W. Green, M.D.; T. G. Thomas, M.D.; A. Flint, M.D.

Surgeons.—J. R. Wood, M.D.; L. A. Sayre, M.D.; J. J. Crane, M.D.; S. Smith, M.D.; W. Parker, M.D.; A. B. Mott, M.D.; C. T. Meier, M.D.; J. W. S. Gouley, M.D.; W. H. Church, M.D.; F. H. Hamilton, M.D.

NEW YORK EYE INFIRMARY, COR. 13TH STREET AND 2D AV.

Clinical Instruction at one P.M.

Clinical Days, *Monday, Wednesday, and Friday,* for the Eye, and *Tuesday and Saturday,* for the Ear, at 12 M.

Surgeons.—A. Du Bois, M.D.; T. M. Halsted, M.D.; C. R. Agnew, M.D., F. J. Bumstead.—*Assistant Surgeons:* J. H. Hinton, M.D.; H. D. Noyes, M.D.

NEW YORK OPHTHALMIC HOSPITAL, COR. 4TH AV. AND 28TH ST.

Clinical Instruction, Tuesdays, Thursdays, and Saturdays, at 1 o'clock, P.M.

Surgeons.—Drs. Stephenson and Garrish.

Army Medical Intelligence.

DEATH OF SURGEON W. J. H. WHITE, U.S. ARMY.

Surgeon-General's Office,
Washington, September 20, 1862.

Orders.—It is with feelings of profound grief that the Surgeon-General announces to the Medical Department the untimely death of Surgeon W. J. H. White, U. S. Army, who was killed at the battle of Antietam, on Wednesday, the 17th inst.

Surgeon White was appointed Assistant Surgeon in the Army on the 12th of March, 1850, and was ordered to New York city, to report to Surgeon Mower, then the principal Medical Purveyor of the Army. In August of the same year he sailed with recruits, under Colonel Craig, for Port Lavacca, Texas, and accompanied them to El Paso, whence he soon was ordered to accompany the escort to the Boundary Commission, as Medical Officer. Being relieved in May, 1851, from duty with that escort, he was assigned to Abiqui, New Mexico, and served at different posts in that Department (he was one of the pioneers of Fort Craig) until the year 1855, when he was ordered before the Medical Board at New York for examination for promotion. Having been examined and found qualified he received a short leave of absence, at the expiration of which (August 18, 1855) he was assigned to temporary duty at Fortress Monroe, and shortly afterwards received orders to sail with troops for Texas. In this Department he served at Fort Davis, San Antonio, Camp Colorado, Forts Duncan, McIntosh, and Clark, from which latter post he was relieved on the 19th of December, 1860, and ordered to report in person to the Surgeon-General.

In January, 1861, Dr. White arrived at Washington, and after having been some time on duty in the Surgeon-General's Office was detailed for duty with troops in this city. Here he was in charge of the General Hospital at the Washington Infirmary, and in addition to his duties in that hospital was detailed as member of the Army Medical Board, convened in this city for the examination of candidates for the position of Surgeon of Brigade, and for appointment in the Medical Staff of the Army.

On the 16th of April, 1862, he was appointed a surgeon to fill an original vacancy, and on the 23d of June, 1862, was ordered to report to the Head-Quarters Army of the Potomac, where he served as Medical Director of Franklin's corps, and it was while fulfilling the duties of this office that Surgeon White was killed on the field of battle.

The first Medical Officer of his corps who has fallen in battle during the present war, the Surgeon-General feels it no less his duty than his pleasure to bear tribute to the many estimable qualities which had endeared Dr. White to his brother officers. Amiable in disposition, and of talents and integrity unquestioned, Surgeon White performed every duty that devolved upon him during a service of more than twelve years to the entire satisfaction of this Department, which feels his loss as that of an officer not easily to be replaced.

As a tribute of respect to his memory the usual badge of mourning will be worn by the officers of the Medical Department for thirty days.

William A. Hammond,
Surgeon-General.

CHANGES.—Surgeon HORACE R. WIRTZ, U. S. Army, now in charge of the General Hospitals at Evansville, Indiana, has been directed to report to Major-General GRANT, commanding the Army of the Mississippi, as Medical Director.

Surgeon CHARLES MCMILLAN, Corps of Volunteer Surgeons, now on duty at the Headquarters of Major-General E. D. MORGAN, has been ordered to report to Asst. Surgeon General WOOD, at St. Louis, Mo.

Surgeon B. J. D. IRWIN, U. S. Army, has been assigned to duty with Brigadier-General STEELE, as Medical Director of the troops under his command.

Asst. Surgeon C. K. WINNE, U. S. Army, has been directed to proceed to Evansville, Indiana, and relieve Surgeon H. R. WIRTZ, U. S. A., in charge of the General Hospitals at that place.

Surgeon D. J. MCKIBBEN, Corps of Volunteer Surgeons, has reported for duty at Hilton Head, S. C.

Surgeon JOSIAH CURTIS, Corps of Volunteer Surgeons, is at the National Hotel, Washington, sick.

Asst. Surgeon W. S. THOMPSON, of the Corps of Volunteer Surgeons, has reported for duty at the Fairfax Seminary Hospital, Va.

Medical Storekeeper GEORGE WRIGHT, has entered upon his duties at the Purveying Depôt, New York city.

Asst. Surgeon HARRISON ALLEN, U. S. Army, has been assigned to the Batteries of Artillery attached to GROVER'S Division, HEINTZLEMAN'S Army Corps.

Asst. Surgeon BOLIVAR KNICKERBOCKER has reported to the Medical Director at Washington, D.C., for duty.

Surgeon E. H. ABADIE, U. S. A., arrived (from West Point, N. Y.) at Philadelphia, Pa. on the 30th ult., to assume the duty of President of the Army Medical Board for the examination of candidates fer the appointment of Assistant Surgeon in the Medical Staff of the Regular Army.

Asst. Surgeon S. H. HOMOR, U. S. Army, has reported for duty at the Ganeral Hospital, Patent Office, Washington, D.C.

Surgeon J. T. HEARD, Corps of Volunteer Surgeons, reports on duty as Medical Director 2d Division 1st Army Corps, Sharpsburg, Md.

Surgeon F. M. HEISTER, Corps of Volunteer Surgeons, has reported for duty as Medical Director to Gen. WHIPPLE, at Arlington, Va.

Surgeon E. MCDONNELL, U. S. Volunteer, has been assigned to the supervision of the hospitals at Sharpsburg, Md.

Surgeon THOMAS H. BACHE, U. S. Volunteers, has been ordered to report to the Medical Inspector-General, for duty as acting Medical Inspector.

Surgeon G. W. STIPP, U. S. Volunteers, has been ordered to report at the Headquarters of Major General MCCLELLAN, to relieve Surgeon ANTISELL, who, when relieved, will report to the Surgeon-General for orders.

Asst. Surgeon J. N. MILLER, 120th New York Volunteers, has been ordered to report for duty to the Medical Director at Washington, D.C.

Asst. Surgeon J. W. S. GOULEY, U. S. Army, has been ordered to report to the Medical Director in Washington, to relieve Surgeon SHIPPEN, U. S. Volunteers, in charge of the Capitol Hospital. Surgeon SHIPPEN on being relieved to report for duty at the Headquarters of the Army of the Potomac.

Surgeon A. WYNKOOP, U. S. Volunteers, has been ordered to report to the Medical Director at Washington, D. C., for duty, in charge of the Cranch Hospital.

Assistant-Surgeon E. J. MARSH, U. S. Army, has been ordered to duty in the Georgetown College Hospital to report to Medical Director, Washington.

Assistant-Surgeon JOSIAH F. KENNEDY has been ordered to report at the Headquarters of Major-General McClellan, and Assistant-Surgeon JOSEPH S. SMITH, U.S.A., to report for duty to Surgeon JOHN CAMPBELL, U.S.A., at Bedloe's Island, N. Y. Harbor.

Assistant-Surgeon C. T. ALEXANDER, U.S.A., Medical Purveyor at St. Louis, Mo., has been ordered to report to the Medical Board at Philadelphia, Pa., for examination for promotion.

LEAVE OF ABSENCE.—Leave of absence has been granted to the following Medical Officers:—

Assistant-Surgeon EDWARD J. BROOKS, U.S.A. (lately in charge of Cranch Hospital in this city), for twenty days, on Surgeon's certificate of disability; and to Surgeon I. B. PEALE, of the Corps of Volunteer Surgeons, for thirty days, on same certificate, by Special Orders No. 254, Adjutant-General's Office, September 22, 1862.

Surgeon S. G. I. DECAMP, U.S.A. (retired list), for thirty days, on Surgeon's certificate of disability. Special Orders No. 256, Adjutaut-General's Office, September 23, 1862.

Assistant-Surgeon S. C. MCCORMICK, of the 134th Pennsylvania Volunteers, for twenty days. Special Orders, No. 258, Adjutant-General's Office, September 24, 1862.

RESIGNATIONS ACCEPTED.—The resignations of the following named Medical Officers have been accepted by the President:—

Surgeon WM. C. THOMPSON, of the Corps of Volunteer Surgeons, to take effect September 19, 1862. Special Orders No. 251, Adjutant-General's Office, September 20, 1862.

Surgeon DAVID PRINCE, of the Corps of Volunteer Surgeons, to take effect September 22, 1862. Special Orders No. 256, Adjutaut-General's Office, September 23, 1862.

RESIGNATIONS TENDERED.—The following named Medical Officers have tendered their resignations to the President:

1. Surgeon C. C. BEEKEN, 75th Pennsylvania Volunteers, on account of permanent disability.

2. Asst. Surgeon JOSIAH F. KENNEDY, U.S.A., now in charge of Seminary Hospital, Georgetown, D.C., on account of ill health.

MUSTERED OUT.—The Secretary of War has directed that Surgeon A. J. BERRY, 38th New York Volunteers, be mustered out of service.

MISCELLANEOUS.—The Medical Director at Washington, D.C., has been directed to increase the accommodations of Cliffburne Hospital to the number of 1000 additional beds, by pitching Hospital Tents on the grounds adjoining.

The Medical Purveyor at Washington, D.C., has received orders to send 1000 iron bedsteads to Frederick, Md.

The Secretary of War has directed the evacuation of the Hospital at the Capitol, so that the building may be purified and prepared for the use of Congress.

It is believed that orders will soon be given for the evacuation of the Hammond Hospital, at Point Lookout, Md., there being many objections against it as a winter residence for the sick.

Many of the applicants for appointments in the Corps of Volunteer Surgeons, who have received permits to appear before the Examining Board in St. Louis, having failed to appear at the time appointed for their examination, the Surgeon-General has directed that their names be dropped, if after a reasonable time they fail to give a satisfactory explanation of their non-appearance.

So much of "General Orders" No. 125, as dismisses Surgeon EDWARD B. DALTON, 36th New York Volunteers, is, by direction of the President, revoked.

MEDICAL DEPARTMENT OF THE WEST.

THE following officers have been announced as Medical Directors of the Armies and Departments within the jurisdiction of the Assist. Surgeon-General, Colonel R. C. WOOD, U.S.A., Chief of the Medical Department of the West; Surgeon W. J. SLOAN, U.S.A., Department of the North-West; Surgeon MADISON MILLS, U.S.A., Department of Missouri; Surgeon B. J. D. IRWIN, U.S.A., Army of the South-West; Surgeon L. H. HOLDEN, U.S.A., Department of the Ohio; Surgeon ROB'T MURRAY, U.S.A., Army of the Ohio; Surgeon H. R. WIRTZ, U.S.A., Army of the Tennessee.

The following Circular of instructions has been issued by the Assistant-Surgeon-General, Col. R. C. Wood, U.S.A., to Medical Directors in the Department under his jurisdiction.

Assist. Surg. General's Office,
St. Louis, Mo., Oct. 2, 1862.

Sir:—The various Reports required for the information of this office have not been regularly received. The following specific instructions are issued for the information and government of the Medical Directors, appointed at the Headquarters of the Departments and Districts which are comprised within the jurisdiction of the Assistant-Surgeon-General.

Having been announced as Medical Director of ————, you will immediately issue such instructions to the Medical Directors of Army Corps and Divisions under your supervision, as will insure from them such promptness and regularity in their reports as will enable you to forward to this office, always in due time, the complete consolidated Reports and Returns required from you.

You will forward to this Office monthly consolidated Reports of sick and wounded, in accordance with forms prescribed by existing regulations: Consolidated monthly Returns of Medical Officers, in conformity with Form 17, Medical Regulations, giving *all* the information required in the "Note" appended to the Form. The Quarterly Reports of sick and wounded will be forwarded directly, as heretofore, to the Surgeon-General. You will instruct, however, the Medical Officers in charge of the General Hospitals in your Department to forward to this Office duplicates of the Weekly Reports required by the Surgeon-General. So much informality, neglect, or delay has heretofore prevailed in the transmission of the required reports, that it is necessary for you to enjoin upon all concerned, that promptness and regularity are in future demanded. The Reports required to be consolidated in this Office are expected by the Surgeon-General in due time, and proper form. Failure on your part to forward the Reports from your Department must be reported to the Surgeon-General, and it is expected that you will enforce the same system of accountability and individual responsibility upon all under your direction.

Very respectfully, your obedient servant,

[Signed,] R. C. Wood,
Assistant-Surgeon-General.

Medical News.

Lint.—At a special meeting of the Providence Medical Association, held at the office of Dr. C. W. Parsons on the 18th of September, 1862, the subject of Lint and its uses was discussed. It was voted, after general consultation, that Drs. Mauran and U. Parsons be a committee to express to the public the views of the Association on the subject. In accordance with this vote, the committee would state, that they fully indorse the very sensible views of their medical brethren of Boston, published in the Boston *Medical and Surgical Journal* of September 11, a summary of which was re-published on the 13th inst. in the *Providence Journal;* that the use of scraped or drawn lint, as recently prepared by our patriotic ladies, is rarely deemed necessary in modern surgery, and that its use in *hospital* practice has indeed been injurious rather than beneficial to the patient, especially as an application to suppurating wounds. On the field of battle, however, its use is common; and for that purpose they would now present an admirable substitute, abundant, cheap, and of easy manufacture, viz. the recently invented steam-rotted and bleached *flax-cotton*. Information in regard to this article may be obtained by addressing the Secretary of the R. I. Society for the Encouragement of Domestic Industry.

Garibaldi's Wounds.—The *Movimento* of Genoa publishes the following bulletin on the state of General Garibaldi's wounds, dated Varignano, September 13: "Nothing new in general. The suppuration is sufficiently abundant, and splinters are beginning to work themselves out." The *Press* of Vienna, of the 13th, contains the following: "We are indebted to a chance circumstance for some correct details respecting Garibaldi's state. A physician of this city received yesterday a minutely accurate description of Garibaldi's case drawn up by his medical attendants, with a request that he would give his opinion in writing, as personal motives prevent him from going to La Spezzia. The surgeon in question says that if the phlebitis formed at the lower part of the ankle cannot be overcome very speedily, amputation will be inevitable. He declares that the wound is very serious, and in even the most favorable issue must have unpleasant consequences; that, even supposing Garibaldi to escape amputation, he will be lamed for life, and subject to frequent attacks of pain. As nothing was said of the other wound, the probability is that it presents no dangerous symptoms.—*Brit. Jour.*

An Amputation Two Hundred Years Ago.—In the Lac des Minimes, recently dug in the wood of Vincennes, the workmen discovered the foundation of a chapel of the convent, and near them two leaden coffins and a box of the same metal. On opening the coffins they were found to contain the embalmed bodies of a woman, about 35 years of age, and a girl of 9 or 10. The box bore the words, "Right arm of M. de Rambure, 1633." The bodies and arm had all been embalmed, and were in tolerable preservation. The arm had been cut straight through, without taking any part of the flesh and skin to turn over the stump as now practised. It is mentioned in Moreri's dictionary that M. Rambure, surnamed the Brave, who had distinguished himself in several battles, died in 1633, after having his arm amputated.—*Brit. Jour.*

Death from Chloroform.—Last week an inquest was held at King's College Hospital by Mr. Bedford, on the body of Elizabeth Freed, aged seventeen. She was admitted in consequence of injuries received from a fall, and was suffering from a sephacelated wound. An operation being necessary, she was submitted to the influence of chloroform, which, as the patient was of a nervous temperament, was administered with great caution, in a short time after which she died. It appeared that she suffered from fatty degeneration of the heart. The verdict was given accordingly, with the remark that the chloroform was properly administered.—*Lancet*

New York County Medical Society.—The Anniversary meeting of this society was held on Monday evening, Oct. 6, 1862, at the hall of the College of Physicians and Surgeons, when the following gentlemen were elected officers for the ensuing year:—*President*, Alfred Underhill, M.D.; *Vice-President*, C. Henschel, M.D.; *Recording Secretary*, G. Furman, M.D.; *Corresponding Secretary*, H. S. Downs, M.D.; *Treasurer*, S. T. Hubbard, M.D.; *Censors*, W. N. Blakeman, M.D., T. C. Finnell, M.D., I. E. Taylor, M.D., W. H. Thomson, M.D., G. F. Woodward, M.D.

An Ambulance System.—The Committee of the Suffolk District Medical Society on the subject of the Ambulance system of the United States Army, have prepared the following memorial, which will be circulated for the signatures of the profession.

"The undersigned Physicians of Massachusetts, satisfied that the present system of Ambulance arrangements is extremely defective, and a cause of great suffering to our wounded soldiers, respectfully petition the Honorable Secretary of War to place the control of it in the hands of the Medical Department of the U. S. Army, with authority to organize a distinct Ambulance Corps."—*Bost. Jour.*

Dr. Ed. W. Lambert has been appointed Assistant Local Secretary for the New Sydenham Society, New York.

Original Lectures.

LECTURES
ON THE
DIAGNOSIS OF DISEASES OF THE HEART.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE DURING THE PRELIMINARY TERM.
SESSION 1862-63.

By AUSTIN FLINT, M.D.
PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.]

LECTURE II.

Recapitulation.—Circumstances Extrinsic to the Heart affecting the Situation of the Apex-Beat, and the Size of the Superficial Cardiac Space.—Liability of Confounding Distension of the Pericardial Sac with Enlargement of the Heart.—Enlargement of the Heart resolvable in'o Two Divisions, viz. Enlargement with Predominant Hypertrophy, and Enlargement with Predominant Dilatation.—Importance of Discriminating these Two Forms of Enlargement.—Signs of Hypertrophy.—Signs of Dilatation.—Case Illustrating Signs of Hypertrophy.—Symptoms of Hypertrophy and Dilatation respectively.—Rhythmical Succession of the Two Normal Heart Sounds.—Characters belonging respectively to the First and Second Sound, as heard over the Apex.—The Two Sounds and Intervals as expressed in Fractions; as expressed in Musical Language.

Gentlemen:—In my last lecture I entered upon the consideration of enlargement of the heart. As preliminary to this subject I called your attention to the topographical relations of the heart. We inspected this organ *in situ*, in the cadaver, and I pointed out the boundaries of the superficial and deep cardiac spaces, and the situations of the base and apex as regards the thoracic walls. Then I indicated the mode of determining that the heart is not enlarged. You saw that physical methods of examination enable us to delineate on the chest of the living body the superficial and deep cardiac spaces, and to ascertain the situations of the apex and base; and if these relations of the heart are found to be normal, we have a right to conclude that the size of the organ is not increased. But if the heart be increased in size, the situation of the apex is altered, the base being comparatively unaffected; the boundaries of the superficial cardiac space are enlarged, and the lateral borders of the deep cardiac space, or, in other words, the limits of the space occupied by the heart, especially on the left side of the chest, are extended. These deviations from the normal relations of the heart, physical exploration enables us to ascertain, so as to determine the fact of enlargement, and also its amount, with sufficient precision for all practical purposes. In directing your attention to the cases of cardiac disease which will present themselves in this hospital, I shall have abundant occasions to repeat the simple means by which the existence and the degree of enlargement of the heart are ascertained. Before passing to an important branch of the subject I must notice certain extrinsic circumstances which may give rise to some of the signs of enlargement. The situation of the apex-beat may be altered by various abnormal conditions acting upon the heart. The diaphragm may be pushed upwards from below, on the left side, so that the apex-beat may be in the fourth, or even in the third, intercostal space. This is to be observed in the patient whom I now introduce. He has ascites and a greatly enlarged spleen. You see the apex-beat is in the fourth intercostal space. The same effect may be produced by pregnancy, by enlargement of the left lobe of the liver, by abdominal tumors, by intestinal tympanites, and by dilatation of the stomach. The apex-beat is also raised by atmospheric pressure on the abdominal walls, or, in other words, by suction, in cases in which there is considerable destruction of lung-substance from tuberculous or other pulmonary disease, and from the diminished volume of the left lung after pleurisy with effusion. A large accumulation of liquid in the right pleural sac may press upon the heart laterally, so as to remove the apex-beat to the left. This will be illustrated in a case of empyema which I shall exhibit to you to-morrow. Of course, we are to take cognizance of these extrinsic causes, and not consider the altered situation of the apex-beat alone, as evidence of enlargement of the heart. The same causes, too, it is obvious, will affect, to a greater or less extent, the situation of the left border of the heart. The area of the superficial cardiac space is also affected by extrinsic circumstances. In emphysema of the lungs it may be greatly diminished; the permanent dilatation of the upper lobe of the left lung may cause it to extend over the greater part of the anterior surface of the heart. On the other hand, in some cases of pulmonary tuberculosis, and after recovery from pleurisy, the left lung may shrink so as to leave a larger portion of the pericardial sac uncovered than in the normal state. In all cases due attention enables us to ascertain these extrinsic circumstances, and avoid the error of supposing enlargement of the heart to exist when it does not.

There is a source of possible error which I can best consider in another connexion. I refer to the liability of confounding distension of the pericardial sac from the presence of liquid, with enlargement of the heart. In cases of pericarditis with effusion, we have notable increase in the degree and extent of dulness on percussion in the præcordia. Without knowledge or care, this increased dulness might be attributed to enlargement of the heart. A proper acquaintance with the differential phenomena, and proper attention, should enable us to avoid this error. I cannot, however, consider the means of discrimination without anticipating points relating to pericarditis, and I shall therefore defer their consideration until I come to treat of the latter affection.

I now proceed to call your attention to an important distinction existing between different cases of enlargement of the heart. It is not enough, pathologically speaking, to say of a case that there exists enlargement. There are different kinds of enlargement. The heart may be enlarged simply in consequence of an abnormal thickness of its muscular walls. This condition is known as hypertrophy, and, if the increased volume be due exclusively to this cause, the case is said to be one of simple hypertrophy of the heart. On the other hand, the enlargement may proceed simply from dilatation of the centres, the walls being not increased, but perhaps diminished, in thickness. Then the case is said to be one of simple dilatation of the heart. On the table before me are two preparations from the Hospital museum, illustrating very finely these two forms of enlargement. In one of these preparations, you perceive the ventricular walls are much thicker than in health, while the ventricular cavities appear to be of the normal size. In the other preparation you see the cavities are enormously increased in size, while the walls are considerably thinner than in health. These are examples of simple hypertrophy and simple dilatation; but it is rare to find such examples. In the great majority of cases, hypertrophy and dilatation are combined. The two forms of enlargement are combined in variable relative proportions. Hence, Hope, and other authors on diseases of the heart, have subdivided cases into two classes in addition to the classes already named, to wit, simple hypertrophy and dilatation. One of these additional classes embraces cases in which the hypertrophy exceeds in amount the dilatation, and the other embraces cases in which the dilatation exceeds in amount the hypertrophy; the former being distinguished as hypertrophy with dilatation, and the latter as dilatation with hypertrophy. This seems to me to render the classification needlessly complicated. It answers every practical purpose to arrange all cases in two divisions, viz. cases of predominating hypertrophy, and cases of predominating dilatation;

including in these divisions the rare instances in which the hypertrophy and the dilatation are simple. I am accustomed to make this arrangement; and the inquiry will now arise, how are we to differentiate, in practice, cases of enlargement in which hypertrophy predominates, and cases in which dilatation predominates? A few words, in the first place, with respect to the importance of this discrimination.

It is by no means a matter of indifference, as regards the gravity of the patient's condition, whether hypertrophy or dilatation predominate. When we come to consider hereafter the pathology of diseases of the heart, we shall see that enlargement by hypertrophy, occurring, as it does, generally in connexion with valvular lesions, is a conservative provision, preventing or postponing evils which would otherwise ensue as effects of these lesions. The hypertrophy involves augmented power of the heart's action, and in this way enables the heart to carry on the circulation, notwithstanding the obstructions and regurgitations incidental to valvular lesions. Dilatation, on the contrary, weakens the heart's action; the circulation is enfeebled in proportion to the amount of dilatation. A large share of the evils, and much of the danger of organic affections of the heart, arise from the weakness of the organ proceeding from dilatation. We shall see, hereafter, that, as a rule, when enlargement is occasioned by valvular lesions, hypertrophy occurs first, and subsequently dilatation; the latter becomes predominant after the thickness of the walls of the heart has reached the limit of abnormal growth. It is, therefore, of very great importance, in order to form a correct opinion of the condition of a patient affected with enlargement of the heart, to determine whether the enlargement involve predominant hypertrophy or predominant dilatation. How is this point to be determined?

Having ascertained by the rules already laid down that the heart is enlarged, in determining whether hypertrophy or dilatation predominate, we are guided, mainly, by the signs and symptoms which denote, on the one hand, increased power, or on the other hand, weakness of the heart's action. Increased power may be shown by the strength of the apex-beat. Placing the finger in the intercostal space, in which this beat is felt, we are sensible of an abnormal force of impulsion. In some cases, however, the apex-beat may be feeble, although hypertrophy predominates, in consequence of a change in the form of the heart, produced by the enlargement; the organ assumes a more globular form, and the pointed extremity being lost, the impulsion may be weak. But other impulses are usually felt. If the apex-beat be in the sixth or seventh intercostal space, impulses are felt in one, two, or three of the intercostal spaces situated above the situation of the apex. These impulses are strong in proportion to the predominance of the hypertrophy. Not unfrequently a cardiac impulse, more or less strong, is felt in the epigastrium; this occurs especially when the right ventricle is hypertrophied. Not only are strong impulses felt in the intercostal spaces, but the ribs are raised by the systolic contractions of the ventricles. The whole præcordia, in some cases, has a heaving movement; the hand or head, when applied to it, being elevated with a degree of force, showing that the heart is acting with abnormal power. An important distinction, here, relates to increased strength due to hypertrophy, and increased activity due to functional excitement. In cases of palpitation, without organic disease, the heart appears to strike against the thoracic walls with great force; this is excited action, not augmented power. It is not difficult to make this distinction practically, but, in determining the existence of hypertrophy, we have the fact of enlargement to guide us, while in merely functional excitement the heart is not enlarged. The signs, then, which denote that enlargement of the heart is due to predominant hypertrophy, are: abnormal strength of the apex-beat, strong impulses in other intercostal spaces, and raising of the ribs or more or less powerful heaving of the præcordia —these signs proceeding from augmented power of the contractions of the ventricles, derived from the increased growth of muscular structure.

On the other hand, the signs denoting weakness of the heart's action in cases of enlargement with predominant dilatation, are: want of strength in the apex-beat, together with feebleness of impulse elsewhere or their absence, and slight or no heaving of the præcordia. The enlargement is generally greater than in cases in which hypertrophy predominates, and, if the thoracic walls are thin, the movements of the greatly dilated heart, as seen and felt in the intercostal spaces, are undulations rather than impulses.

There are certain corroborative signs pertaining to the heart-sounds, denoting on the one hand hypertrophy, and on the other hand dilatation, which I shall notice hereafter when the heart-sounds have been considered. I shall have occasion to refer to enlargement of the heart in treating of valvular lesions, and I shall then illustrate a point connected with the present subject to which I have not as yet referred, viz. the means of determining that the enlargement is especially of the right or of the left side of the heart. In a large proportion of cases of enlargement, the right and left side of the organ are not equally increased in size; the hypertrophy or dilatation may be chiefly seated in, or even limited to, the left or the right ventricle. There are certain signs which frequently enable us to determine which of the two ventricles is especially enlarged. The consideration of these signs we must defer until the heart-sounds have been considered.

I shall now introduce a patient affected with enlargement of the heart. Reviewing the signs of enlargement as they are here illustrated, the question which follows is: Does hypertrophy or dilatation predominate in this case? Placing the finger in the sixth intercostal space, in which the apex-beat is felt, I feel the movements of the apex to be abnormally strong; it presses against my finger with force, and the movements are so marked as to be visible over the whole amphitheatre. Impulses are seen and felt in the fifth and fourth intercostal spaces; these impulses are quite strong. Placing my hand over the præcordia I feel a strong, heaving movement. In view of these signs, then, we may decide that hypertrophy predominates in this case. Patients affected with an enlargement of the heart in which dilatation predominates, are apt to be in a condition rendering it difficult to come into the amphitheatre. There are several in my wards, and I will call your attention to them at the bedside on my clinical days.

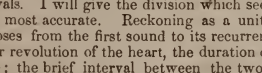
In discriminating between hypertrophy and dilatation, we are to take into account symptoms as well as signs. But with respect to symptoms I have to repeat a statement already made, viz. in the great majority of cases enlargement is associated with, and has been produced by, valvular lesions. The symptoms are dependent, to a greater or less extent, on the latter. Hypertrophy, without valvular lesions, is exceedingly rare, but instances do occur. I met with a marked example during the last summer, in a case in which sudden death occurred from congestive apoplexy. I exhibited the specimen to the Pathological Society; the walls of the left ventricle were more than an inch in thickness and the valves were perfectly sound. The person, a young man, appeared to be in perfect health after the moment of the apoplectic seizure. The symptoms belonging to simple, uncomplicated hypertrophy are those proceeding from abnormal power of the heart's action, viz. a strong arterial pulse, flushing of the face, a tendency to active congestion of vascular organs, especially the head, etc. But the case just referred to shows that marked hypertrophy may exist as a latent affection. Dilatation of the heart may also exist without valvular lesions, and the symptoms are those which proceed from weakness of the organ. These are: dyspnœa, from deficient power of the right ventricle, and accumulation of blood in the left auricle; general venous congestion from accumulation of blood in the right cavities of the heart, together with defective power of the left ventricle, and, as a result of this congestion, œdema and general dropsy. In extreme cases lividity of the prolabia and of

the surface generally, is marked; the pulse is notably feeble, and there is a tendency to syncope. When these symptoms are present in cases of dilatation, associated with valvular lesions, they are due, in a great measure, to the former. Valvular lesions, in fact, do not, as a rule, lead to dyspnœa, lividity, syncope, and dropsy, etc., until, as a consequence of these lesions, dilatation has succeeded hypertrophy, and these symptomatic phenomena arise from the feebleness of the heart's action incidental to the dilatation.

Leaving, now, the subject of the enlargement of the heart, I shall proceed to ask your attention to the diagnosis of valvular lesions. And, as preliminary to the consideration of this subject, I must enter into some account of the normal heart-sounds. In order to understand the signs on which the diagnosis of valvular lesions is based, it is essential to know certain points relating to the normal sounds of the heart. These sounds are two in number, and they are usually called the *first* and *second* sound; sometimes the systolic and diastolic. Let me describe these sounds as they are heard by applying the ear or the stethoscope at the point where the apex-beat is seen or felt. I shall give the characters belonging to each of the sounds, and I will ask you to verify the correctness of my account for yourselves, which you can easily do by listening to them in the healthy chest. Applying the ear over the apex of the heart, you will hear two sounds following in quick succession, the interval between the two being so short as to be barely appreciable. Then follows a distinct interval. Now, the two sounds continue to occur uniformly in the same relation to each other, viz. separated by a very brief interval, and after the two sounds have occurred, there is a distinct interval. This succession of the first and second sound constitutes the rhythm of the heart-sounds. We will recur to this presently.

The two sounds, as heard in this situation, viz. over the apex, are not identical. I will mention the characters by which they are relatively distinguished, and ask you to verify them for yourselves. The first, or systolic sound, is louder than the second, or diastolic; it is longer, usually twice as long; it is lower in pitch, and it has a certain quality to which we may apply the name *booming*. The second, or diastolic sound, is less intense than the first, or systolic; it is shorter; it is higher in pitch, and it has a certain quality which we may call clicking or valvular. These characters are more or less marked in different persons, but they are sufficiently marked in most healthy chests. Again let me ask you to verify and to make yourselves practically familiar with them before my next lecture.

Returning, now, to the rhythmical succession of the two sounds, it is customary to represent them, together with the intervals, by the fractional parts of a unit. It is not practically important to do this, and all are not exactly agreed as regards the relative fractional value of the sounds and intervals. I will give the division which seems to me to be the most accurate. Reckoning as a unit the time which elapses from the first sound to its recurrence, called the beat or revolution of the heart, the duration of the first sound is $\frac{1}{3}$; the brief interval between the two sounds is $\frac{1}{8}$; the duration of the second sound is $\frac{1}{8}$, and the long interval or silence, is $\frac{1}{4}$. We may express the same fractional subdivision in musical language, thus:—The first



sound is a crotchet followed by an interval of a quaver rest; then the second sound is a quaver, followed by an interval of a crotchet rest.

The death of Dr. Josiah Trowbridge, of Buffalo, one of the oldest and most distinguished physicians of western New York is announced.

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from* p. 187.)

Turning now to the other form of the disease, we have here an external and a sectional view of the contracted and hobnail kidney. It is contracted to about two-thirds its proper size. It does not seem to have undergone much change of color. It is contracted about equally in all directions, except that portions in points or lines have been retracted more than other parts, the effect of which is apparently to throw out, over the whole exterior, abundance of warty elevations and irregular eminences, separated from each other by little irregular valleys or rounded depressions. The vascularity has lost its network and circumlobular arrangement, and is grouped into stellate or branching forms, which occupy almost wholly the depressions. In some of these depressions are ecchymotic points, and on the upper half of the organ is an ecchymosis (subcapsular) of an inch and more in extent. The elevations vary in size from that of half a B B shot to that of half of a large pea. The capsule turned off is thicker, more opaque than natural, and has on the inner surface fragments of vessels that are common to it and the surface of the kidney. It was pretty firmly adherent. On section, it is noticed that the pyramids extend nearly to the external surface of the kidney, leaving the cortical layer a thickness of only about one eighth of an inch, and in some places less. They are compact, well defined, and whitened towards their apices. The whole organ is firm and resisting, so that thin sections are easily cut from it. The pelvic membrane is thick, whitish, and rather vascular. The color of the section, with the exception of the thin external border, is greyish rather than brown, while that of the cortical border is reddish brown. The vessels are well filled, but not congested.

Here finally I call your attention again to the horse-shoe kidney. The two parts together fall short of the size and weight of two healthy organs. The external view shows it small and smooth; the vessels not visible; the color singularly but accidentally changed to an olive, as has been already noticed. It is dotted over with yellowish grey spots. The capsule is thick and strong, and rather firmly adherent, but not vascular. The vascularity, however, cannot be fairly judged of from the present appearance, as the specimen was sent from Rhode Island, and had been two days removed from the body when it came under observation. The section shows some of the pyramids reaching fairly to the external surface, and others leaving the cortical layer of the average thickness. They are, like the last, compact and well defined, but not whitened towards their apices. The organ is tough, that is, difficult to tear, but not firm to pressure, so that thin sections are not easily made. The pelvic membrane is white and almost opaque, but shows no vessels. The color of the section is, in the main, the same as that of the external surface, and this being accidental and exceptional, we make no account of it as a feature of Bright's disease; but the section is dotted over with yellowish grey spots like those above noticed. These, as will be seen hereafter, are evidences of fatty and granular degeneration, and are a lesion of the enlarging kidney, though these specimens are of the fibrous variety.

I have now exhibited illustrations of the two leading forms of Bright's disease, and of the most important stages by which the extreme lesions in these two forms are reached. There is one condition more that is important, of which I have no illustrations. It is that state in which there is enlargement of the kidney without material change of color. All the vessels are full, and in a thin section the

malpighian bodies are seen often as bright red spots retaining the blood, while it flows out of the cut veins. The kidney is loaded and distended with blood, but the characteristic exudations have not yet taken place. It is a state sometimes seen in the acute variety of the affection when death occurs early. Were it not for the symptoms, namely the œdema, the pale complexion, the albumen, the casts, and often blood in the urine, the varying indications of uræmia, etc., it might be considered congestion and nothing more. Regarded as a stage of Bright's disease, correctly no doubt, when the acute subsides into the chronic state, it is not to be inferred that this deep congestion is at all essential to the latter. The chronic affection usually comes on insidiously, with a congestion no doubt, but a congestion which in a degree falls far short of that here described.

Regarding the kidneys of normal size; to the eye alone, they usually present nothing very characteristic. Sometimes they are firm and hard; they may be set more or less thickly with greyish grains; the pyramids may be pale and firm in their internal halves; they may show by these or other appearances in which direction the disease is tending, but often, though the signs during life have been sufficiently manifest, after death the microscope alone can reveal the changes which have actually occurred.

I shall not stop here to indicate the points of resemblance and contrast between the small and the large kidney, for that can be much better done when we have studied the changes which the microscope discloses in each. I pass, therefore, now to this branch of our subject. I do not intend to give the individual analysis of the particular organs which have been thus far described, although my notes would enable me to do this; but to explain first what the changes are, and afterwards indicate somewhat statistically the relations of each of these changes to the different forms of the disease.

Here, as in the general description of the kidneys, fearing that words would not adequately present the facts to the mind, I have reduced all the characteristic appearances to pencil sketches, which I believe will be found truthful, though they may lack artistic elegance and finish. On these small cards are the drawings as they were made ten years ago for my own use in comparing one case with another. The numbers correspond with the numbers of the cases. On the large sheets hanging against the wall are magnified views of the most striking of the appearances from the cards. The representations on the cards are at a magnifying power of four hundred diameters.

Dr. George Johnson (Diseases of the Kidney, p. 323) has expressed the conviction that, although new fibrous tissue is sometimes developed in the kidney, its occurrence "is an unessential, and indeed, an accidental phenomenon, and that it has no important share in the atrophy," etc. But Frerichs' doubt regarding the existence of a normal fibrous matrix is, he says, "a piece of scepticism which I am at a loss to account for." Regarding the existence of the fibrous matrix, I, with him, am surprised that there should be any doubt. Since the publication by this Academy of the careful researches of the late lamented Isaacs, I cannot believe that any of its Fellows can hesitate on this point. But that a close observer like Dr. Johnson should not often have found the evidence of new fibrous tissue in diseased kidneys, and have seen the important morbid changes to which it gives rise, may justify me in quoting his comment on Frerichs' scepticism against himself.

In looking for new fibrous tissue in the kidney we are not, in the main, to look for marks which will distinguish the new from the old or normal. In some instances there is no difficulty in recognising oval nucleated cells which are produced into fibres in the direction of their long axis. These, though they are to be found in the normal matrix, sometimes exist in considerable quantity, and then, I believe, they indicate a rapid production of new fibres. The appearance of these bodies may be seen on many of the cards, and here on the large drawings. But in general the increase of the fibrous element is effected, whether by fibrillation or by fibre-cells, in such manner as to render any distinction between the old and new, or rather between the fibres that are normal in quantity and those that constitute the excess, impossible. This, however, is not peculiar to diseased kidneys. Nobody can teach us how to distinguish the normal fibres in cirrhosis, and separate them from those of the excess. The same is true of fibrous disease of the testis, indeed of all parts that have undergone this change. The excess seems to depend on an unnaturally rapid growth of fibres rather than on growth by any new laws. It depends on quantity, not on kind. The question then is, does disease ever cause an increased quantity of fibres to be laid down in the stroma or intertubular portions of the kidney? If it does, then another question follows; does this unnatural amount and new fibrous matter produce any changes in the form and function of the organ? Both these questions, I cannot doubt, must be answered in the affirmative. I am aware that we have not the means of demonstrating the facts with absolute certainty by count or measure, but after the inspection of a great number of kidneys, healthy and diseased, and an unbiased comparison of the two kinds, my judgment cannot exclude the impressions, even though somewhat general, of microscopic vision, any more than it can those of quantity and proportion in things that are under daily observation by ordinary sight. In making this statement I do not forget that if the tubes and vessels be dwarfed and shrunken, the quantity of fibrous tissue remaining normal, the latter may *appear* excessive, or that the decaying tubes may resemble fibres; but the possibility of such a mistake has been in my mind while I have been studying this point, and the conviction I have stated has been confirmed nevertheless. Further, I cannot but agree with those who ascribe this dwarfing and obliteration of tubes and vessels, no less than the diminished size, rugged surface, and hardened tissue of the kidney, to the contractile action of this overgrown structure of fibres. For the appearance of this morbid increase of a normal element I cannot do better than refer to Dr. Isaacs' drawings of the "Fibrous Matrix of the Kidney," as seen by him in the inferior animals and in man. (*Trans. of the N. Y. Acad. of Med.* Vol. I. Pt. IX. pp. 418—431.) In fig. 41 is shown this fibrous matrix in the quantity which, after extended search, he regards as normal. It will strike every one who uses the microscope that he often finds kidneys in which the fibrous element is not only in larger proportion, but is absolutely in marked excess over what is there represented. Indeed Dr. Isaacs, who worked by measure, if not by count, in his next figure shows the matrix in much larger quantity, and though he does not say that the organ was diseased, he goes on directly to recognise the fact that it may be (p. 428). "Thickening and induration of the matrix may produce injurious effects otherwise than by the constriction of the tubes and malpighian bodies," "by direct pressure on the vessel," etc. For me, then, the fibrous element is often in excess, and the fact is not manifest in the appreciable characters of the fibres, as seen by the microscope (except when there is an unusual production of nucleated fibres or fibre-cells), but in its abundance alone. This statement, however, is not applicable to the horse-shoe kidney just now described. In that, and in that alone, among these thirty cases, the fibres had a peculiar appearance. They were not only very abundant, but they had been formed in broad, irregular, distinct, branching, non-striated, glistening bands. Their existence was not uncertain, as it often is in healthy kidneys, but they were the conspicuous objects of every field, obtruding them upon the attention rather than waiting to be searched for.

Again, there is in Bright's disease a singular decay of the cells forming the epithelial lining of the uriniferous tubes. They break up into fine granular matter. The view which I here indicate on the large sheets, and some of the figures on card No. 16, show the healthy cells. They are represented as lying one in contact with another, and the blendings can be but indistinctly seen, but they are so united as

to make a complete tubular lining within and in contact with the delicate basement membrane which forms the outer boundary of the tube. They are of considerable thickness, so that in the small straight tubes they occupy one-half the diameter, leaving only a very small inner tube for the secretion to flow through. Each of these cells has its nucleus, and these nuclei are the most conspicuous parts of the cells on account of the distinctness with which they can be seen. These cells, it should be noticed, contain nothing that is visible but their nuclei, and here and there a minute globule of oil. Now mark the steps by which this granular decay is effected. Here is a view of these epithelial cells preserving the same relations to each other and to the basement membrane as in the healthy tubes, but they have lost something of their thickness. They are no longer transparent, but each cell is occupied by myriads of exceedingly minute grains. Curved lines still indicate the blendings of the cells in some parts, while in others these lines are lost in the general though incipient granular degeneration. The nuclei, however, are for the most part distinct, and mark the position of each cell. The nuclei have not become granular, but they have generally lost their nucleoli. A few of the cells do not contain a nucleus. From these in the progress of decay the nucleus has been discharged. The nuclei are undoubtedly susceptible of this granular degeneration, but most of them appear to be discharged before the process is completed in the cells. Next observe these several figures; the tubes are seen lined with a fine granular matter in which neither cell nor nucleus can be distinguished. The cells have been wholly destroyed, completely disintegrated, but the matter into which they have been transformed still adheres to the basement membrane, leaving the tube pervious. In these instances the nuclei have either partaken of the granular decay or have escaped. But this is not always the case, for not unfrequently in the midst of this granular matter the remains of nuclei can be seen, and also fragments of cells. It is worthy of particular attention that in tubes that are the seat of this granular decay there is no attempt at the reproduction of cells. No newly formed cell or nucleus can be seen pushing off the granular matter. The epithelium seems to be for ever lost, and the function of the tube permanently abolished or gravely modified. It is proper to remark here that no kidney ever has all its tubes in this condition. Many, even in the extremest case of this disease, still possess their epithelium but slightly changed or healthy. We have no means of studying the function of the healthy and granular tubes separately. If we had, here would be a condition which might lead us to a knowledge of the real duty and office of the epithelium. This granular matter is not unfrequently found to be mixed with a greater or less number of small oil globules. These tubes, you will notice, do not contain them, but those on the next sheet represent that concurrence. There is still another step in this morbid process. The figures I now indicate show the basement membrane entirely naked; not a granule, or globule, or cell, or nucleus can be seen upon it. One is entirely empty, but others still contain the granular matter rolled into various forms and occupying the centre of the tubes. In this it has assumed a club shape, comparatively a large cylinder below, half filling the tube and growing smaller as we follow it upwards. In that, it has been formed into rather a thin rod, straight, then curved at one extremity, but directly bent into zigzags crossing and recrossing the tube many times. Here again it should be noticed that though the basement membrane is denuded, having cast off the granular matter that lined and obscured it in the last figure, it exhibits no power even now to reproduce its epithelium. This stage of the granular degeneration is not so frequently seen as the empty tubes, but it is not very rare; I have met with it six times in the thirty cases, and with equal frequency in the cortical and tubular structures.

(To be Continued.)

NEGLECTED CASES.

By CHARLES F. TAYLOR, M.D.
OF NEW YORK.

INFANTILE PARALYSIS.

(Continued from page 189.)

With regard to treatment, there is but one idea to act upon. The development of every organ takes place in consequence of the use thereof. We must use the member. Rubbing and passive movements aid the circulation, and these feebly assist in its preservation, but cannot affect the conducting power, the nerve. We wish to develop the *nerve*. We must, therefore, exert the *will*. But the will does not penetrate, unaided, the deteriorated nervous tracts, but according to a powerful instinct, more readily traverses the accustomed, unobstructed nerves, and stimulates healthy muscles. This *instinct* to avoid using a paralysed member is more powerful than the *desire* to use it: hence the constant failure of unaided efforts. A patient when asked to perform any act with the paralysed member, instead of attempting it will immediately produce a motion resembling it, or analogous to it, but made with the unaffected parts. You can only accomplish the desired object of concentrating the volition upon paralysed muscles, by placing the patient in such positions and making the conditions generally such that it will be *difficult* to use the *unaffected* parts. In this way the instinct, instead of thwarting, aids the effort. And whatever skill there may be in the treatment of such cases, lies not so much merely in the theory, as in the tact with which these favoring conditions are sought out and adapted to particular cases; the *morale* of the patient and his hearty coöperation must be secured; till a decided acceleration has been given to the nutrition of the paralysed nerves and muscles. The particular methods by which this is done, especially in young children, depend too much on circumstances varying with each case and disposition, to be particularized here. In adults, where we have the coöperation of the intellect, these methods may be reduced to a more definite system; but here again we have lost so much by delay, in the increased atrophy of certain tissues, that the difficulties are always increased. Let me illustrate some of the difficulties to be encountered in the treatment of very young children, and how they are to be overcome.

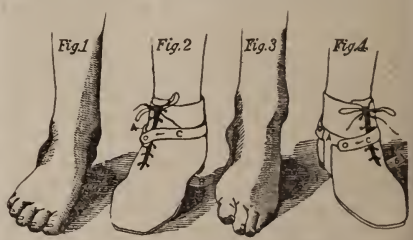
A child of two and a half years old is presented for treatment, for it is quite possible to accomplish all desirable objects even at that early age. The paralysis we will suppose to be of the leg, which is shorter than the other, softer, smaller, and useless. The child has no more idea of using it than he has of engineering. He could not use it if he should try, and he does not know how to try; besides, he is too young to comprehend if he is told. He is peevish, wilful and spoiled in temper, because he has been lame; and since the electrician gave him the "shock" he screams and kicks (with the *well* leg!) at the very name of doctor. What shall be done with such a case? Speak to him and he runs away; leave him alone and he is crippled for life; seize him and endeavor to force him, and he uses himself vigorously—*except* the paralysed leg! My method is as follows. First let the child see you without making any advances to him, not even speaking to him, till he has become accustomed to your presence; never at any time attempt much familiarity with him. Take occasion, if he is timid, to pass near him, but not to touch him; then sit near him; never call him; but on a proper occasion, take him on your lap. If he tries to get away, put him off on the *other* side, so that he will gain no point with you. Thus he will get accustomed to being handled, and you leave the impression of having had your way. Very soon you can set him on his *well* foot—it must always be the *well* leg first—you put one of his arms around your neck for him to steady himself by; then with one arm around him and one having hold of his knee, you gently bend the knee forward, but protecting him so that he will get no apprehensions of falling. As his knee is thus

pressed gently forward, he instinctively makes an effort to straighten it and is allowed to do so. Then the same is repeated till he gets accustomed to this kind of curtseying motion, a movement which requires a great effort, and uses powerfully all the muscles of the leg. You may have tried half a dozen times or half a dozen days before you have accomplished all this. But if you have been careful, kept your patience, and said nothing, you will have done it at last. In this way the child is taught what you wish of him; and when you turn him on to the paralysed leg he makes a similar effort to the one he has just learned to do with the other. At each step you must teach him by his instincts—as Rarey does the horse—for he can understand no other language. It is astonishing how readily they will learn; how vigorously and faithfully they will work; and, best of all, how rapidly they improve. It does not take long, generally, to teach a young child, like the one supposed, to do all necessary things. But, of course, it takes time and patience and considerable ingenuity to carry out such a treatment in all its thousand variations. A child soon learns to try whatever is required of him; but he must never be required to do that which he cannot easily accomplish. Each successive step must be made easy, and all chasms must be so well bridged over that he will shrink from nothing. In this way the development of the paralysed limb or muscle, as the case may be, must be kept up till the relative difference between it and the rest of the body is so far diminished that the patient begins voluntarily to use it; after that point is reached, the improvement will keep on spontaneously from the acceleration given to it by the treatment.

From a large experience in this class of cases, I am certain that, by carrying out the ideas above set forth with tact, ingenuity, and perseverance, the majority of these cases may be practically saved from becoming lifelong cripples. Here are the general principles only. The minutiæ of the treatment and illustrations of the various apparatus made to facilitate it, would take too much space to explain in an article like this.

But the one idea of *isolating* the paralysed muscles, to the utter exclusion of the others, should never be lost sight of for a moment. An indefinite, scattered volition has no curative effect whatever, because it fails to traverse the obstructed (so to speak) nervous tracts or to stimulate the more irritable muscles. The movement of the limb and the contraction of the muscle even, are always secondary, and are only a convenient method of securing the initial effect of the volition on the nerve. But the movement is not absolutely necessary; for if we could secure the same effort without it, the effect on the development would be nearly the same. I have seen several instances where the apparently completely atrophied muscle made no perceptible contraction, but after vigorous efforts, continued for a long time, would positively begin to increase in size, and finally exert its function. In one case, particularly, after the muscle had been for some time increasing in size, it suddenly, under my own eye, contracted, for the first time. It always retained the power and restored the usefulness of the member. One of the complications of infantile paralysis is a twisting of the ankle outwards or inwards, producing a species of talipes valgus, varus, etc., as the case may be. This deformity is produced by the unequal paralysis and consequent relaxation of certain muscles, rather than by the over-contraction of others, except that tonic contraction which always takes place when an antagonist relaxes its force. That is, I have never found any irritative contraction, such as we have in apoplectic paralysis, causing strong muscles to overpower their weaker antagonists: or in the foot, hand, and other parts. But there is great relaxation of the ankle-joint; the foot is easily twisted to one side, and, from the effects of position alone, certain muscles become permanently shortened, while others are correspondingly elongated. This deformity, if not remedied, is always unfortunate, as it still further prevents the use of the leg, by impeding locomotion, when otherwise it might be serviceable. Tenotomy, in some few cases, may be proper, but it is seldom so, partly on account of the great weakness of the joint which might be increased by the operation, and especially because in most cases this deformity can be cured without having recourse to this operation. The ordinary "leg irons" sold in the shops for these weak ankles are of very questionable utility. They are heavy, awkward, liable to break and get out of order; confining and preventing what little muscular action there might otherwise be, and above all, do nothing towards a cure. The most that can be said of them is that, holding the ankle from bending beyond a certain distance (they never entirely prevent it) they made progression possible in come cases. But in most cases, from the difficulty of putting on the shoe with its cumbrous apparatus, the foot is crowded down into the shoe in such a distorted manner that the weight is borne on the side instead of the sole, and the deformity is thus made worse. All instruments should be curative in their tendency, but this, at best, only temporarily aids progression in a very few cases.

The accompanying cuts illustrate a simple contrivance which I have used for several years, with perfect satisfaction. Figures 1 and 3 are good illustrations of these deformi-



ties of the foot and ankle, the result of infantile paralysis. In Fig. 1, the tibialis anticus and posticus, and in Fig. 3 the peronei muscles, are relatively more paralysed than their antagonists on the other side of the leg; and hence the ankle, not being supported on that side of the paralysed muscles, turns towards them, and away from those relatively stronger. In course of time the shortening of one set and the elongation of the other set of muscles become permanent. Thus we have talipes valgus (Fig. 1), or varus (Fig. 2). A proper treatment would seek to reverse this order of things, by efforts to expand the contracted muscles and to allow the elongated ones to shorten. This can be effectually done by a very cheap and simple means. Figures 2 and 4 represent the same feet shown at Figs. 1 and 3, dressed in a manner to accomplish these results, and at the same time to give a firm and secure basis on which the patient can with confidence stand; while, standing or walking, there is continually being effected something towards a cure. This contrivance consists of a piece of steel (*a*, *b*) riveted to the bottom of the shoe in contact with the heel; one end (*b*) passing out on the side towards which the ankle bends about one inch beyond the foot and pressing on the ground, while the other portion (*a*) presses up beside the foot to just below the ankle. Now, if we button the strap (*c*) around the ankle from one side of the top piece (*a*) to the other, the ankle must be held firmly up when the foot is pressed upon, being supported by the projection (*b*) resting on the ground. There is no getting away from it; for at each step, though the joint is perfectly free when the foot is taken up, whenever the foot comes down the projection (*b*) acts as a lever to turn the sole of the foot flat on the ground, while the other end (*a*) is thrown off, pulling after it the ankle held firmly by the strap (*c*). Thus, in Fig. 3, the foot would be turned *outward* as at Fig. 4; or in Fig. 1 it would be turned *inward* as shown at Fig. 2, and at each step stretching the peronei (Figs. 1 and 2) or the

tibialis anticus, posticus, &c. (Figs. 3 and 4), as the case may be; and also gradually moulding the joint back to its proper shape and position; at the same time increasing instead of diminishing the motions of the muscles.

Progress of Medical Science.

RADICAL CURE OF EXOMPHALOS IN THE ADULT.

Dr. Patrick Heron Watson has given in the *Edinburgh Medical Journal*, the details of a novel operation for the cure of exomphalos in the adult. Dr. W. was requested last February to see a married woman, aged 35, who had a hernial protrusion in the situation of the umbilicus, about as large as a cocoa-nut with the husk. It was composed principally of bowel, but partly of omentum. About seven years before she had received a kick from a cow, immediately after which a protrusion showed itself in the situation referred to. It was always reducible, but she was never able by any contrivance to keep it in position. This was due partly to the size of the protruded contents and partly to a tendency which she had to obesity. The protrusion, from being comparatively small at first, gradually increased in size. The opening was large enough to admit the ends of the four fingers covered by the pouch of redundant skin. When walking about, the protrusion would hang down in front of her like a bag with the cicatrix of the umbilicus at its most dependent portion. The patient being extremely anxious to obtain relief by operation, Dr. W., from the condition of the parts, the opening being large, the amount of protrusion being great, and the absence of any canal between the sac and the abdominal cavity, did not think it advisable to attempt to follow the ordinary plans which are recommended for the treatment of hernia. He thus describes his method of procedure in this case:—

"It occurred to me, that by passing a wire backwards and forwards subintegumentally through the margin of the fibrous aperture, the parts might be drawn together, as the mouth of a bag or purse is by a string, so as to prevent all protrusion for the time, while such an amount of consolidation would occur as should effect the permanent occlusion of the opening. Accordingly, on the 20th of May, the patient having had her bowels freely evacuated, I reduced the hernial contents, and keeping them reduced by introducing the fingers of the left hand into the large circular opening, I passed the point and shaft of a needle in a fixed handle armed with stout silver wire, three times backwards and forwards, subcutaneously, through the upper half of the tendinous circumference of the aperture. The point of the needle was then carried outwards through the skin, and the wire disengaged. Having then withdrawn the needle, it was again armed with the other extremity of the same wire, and, introducing its point by the first cutaneous puncture, it was passed three times backwards and forwards through the lower half of the circumference of the tendinous opening, and made to emerge through the same cutaneous puncture as the end of the wire which had been first passed. In this way the aperture was surrounded by a loop of wire, and its margin so picked up as to admit of its being firmly drawn together. The two ends were now drawn by an assistant across each other, when the aperture was felt to become more and more contracted, until the little finger was tightly constricted; with a little more traction this opening was felt to become entirely occluded. The ends of the wire were now crossed two or three times, so as to twist them together, and thus prevent the opening from becoming relaxed. The ends were further crossed over a roller bandage, so as to admit of the wire being tightened, by twisting from day to day should this be requisite. To afford steady support, a pad was placed over the site of the hernial aperture, and a flannel bandage carried round the abdomen.

"As the immediate result of the operation the sac became distended with serous fluid and masses of lymph. But these were speedily removed by absorption without the employment of any treatment. Slight suppuration, however, occurred along the course of the wire, where it emerged from the skin, and a limited abscess formed beneath the skin, but external to the tendinous surface; this was opened—after which the parts cicatrized. At the end of the first week the wire was daily twisted more and more, and on the tenth day after the operation the wire came away of its own accord. The loose integumental texture which enveloped the hernia gradually contracted until the surface became quite level, and a mere thimble-like projection indicated the portion of the tissues which had been spread out over the rupture. On the 20th of March, eighteen days after the operation, the parts were perfectly consolidated. After this the patient was up every day and walked about; and by the 20th of April was so perfectly strong and well, as to be able to return to the country to resume her duties in the kitchen."

In oblique inguinal hernia, and in femoral hernia he does not think, owing to the peculiar anatomical arrangement of the parts, that the operation would be justifiable; the relation of the hernial sac to vascular parts rendering its performance attended with too great a risk. He, however, recommends it in cases of direct inguinal hernia. He says—

"In such cases, then, there seems to me to be nothing which should so absolutely interfere with the safety and success of the encircling of the fibrous textures constituting the mouth of the hernial sac in the manner already detailed, as to forbid its employment. The epigastric artery could alone come in the way, and might with moderate care be easily enough avoided, the finger being passed along with the integuments within the abdomen, so as to guide the point and passage of the needle. Having, however, had no occasion, since treating the case of exomphalos which I have detailed, and which led to the first employment of this method, to meet with any case of direct inguinal hernia which could not be retained by means of a well-fitting truss, I can only throw out these remarks with reference to the adoption of this plan in such cases, as a suggestion which, although it has no foundation in experience, may appear not unworthy of being tested in actual practice."

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, June 25, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

CANCER OF THE LIVER.

Dr. Loomis presented a specimen of a liver taken from an Irishwoman who entered Bellevue Hospital on the 19th inst. She stated that she had been well up to eighteen months before, when she began to have symptoms of dyspepsia. She vomited her food without its being changed; at the same time she suffered from pain, sometimes of a severe character. Two or three years previous to this she had felt a tumor in her right side, which, however, had not decreased up to the time the aforementioned symptoms developed themselves. She was the mother of four children, the youngest being three years of age. Her dyspeptic symptoms continued to increase in severity for five or six months, when she began to vomit a dark-looking fluid which she described as resembling coffee grounds. She began to lose flesh, her pains became more intense, and the tumor increased rapidly. Thus she lingered along gradually emaciating until the time of her admission. Her pulse was then imperceptible at the wrist, her tongue brown and dry. She was very much emaciated, and was unable to turn in bed without assistance. Her mind was clear and her skin was of a deeply bronzed hue, the sclerotic coat of the eye being of a deep yellow. She was unable to retain anything on her stomach, rejecting it almost

immediately. Pain in the epigastrium was constantly complained of. On examination the abdomen was found evenly distended. Percussion in the lower portion detected the evidence of fluid. A tumor was also discovered in the epigastrium extending from one side to the other, and as low down as the umbilicus, the surface of which was nodulated and extremely tender. She lingered three days, and died in a state of coma. On making the autopsy, the heart and lungs were found perfectly healthy. The liver weighed eight pounds and twelve ounces, and was infiltrated with cancerous material. The mesenteric glands were filled with the same deposit, but were not very much enlarged. The uterus and ovaries were also the seats of cancerous deposits. No deposits were found in other parts of the body. The woman menstruated up to a year before her death.

Dr. Sands stated that he had made a post-mortem examination of a woman who had cancerous discase in both ovaries, and who was menstruating at the time of her death.

FIBRO-PLASTIC TUMOR.

Dr. Sands presented a cystic growth removed by Dr. Parker from the neck of a gentleman thirty years of age, in excellent health, and in whom the tumor appeared about a year ago. It was situated on the right side of the neck in front, beneath the angle of the jaw, almost directly over the situation of the common carotid at its place of division. The tumor was painless, and grew slowly, having in a year attained only the size of a walnut. It was elastic to the touch, and no one could say prior to its removal whether it contained fluid or not. It was always freely movable. Its removal was accomplished without difficulty. On being opened after removal, it was found to contain a soft solid material having a whitish color with a slight tinge of red. The growth was inclosed by a cyst wall, not secondary in its formation, not consisting merely of condensed areolar tissue, but one which was well marked and which peeled off half of the tumor, and displayed beneath a somewhat lobulated exterior. From the other half the cyst wall could not be peeled off so readily in consequence of its being formed of several small cysts. The microscopic appearances were those which are known to belong to fibro-plastic tumors.

EPITHELIAL AND TRUE CANCER COMBINED.

Dr. Sands presented a second specimen, which was mainly interesting on account of its microscopic appearances. The growth was removed by Dr. Parker from a gentleman fifty years of age. The patient had been the subject of four different operations for epithelial cancer of the lower lip. The last appearance of the disease first manifested itself about a year ago last December. The successive operations reduced the size of the lip so much that it was necessary to perform a plastic operation in the removal of the mass.

The microscopical appearances were very curious. There were the usual elements present of epithelial disease, but besides there were present structures which no one would hesitate to pronounce cancerous if they saw them alone. The cells were smaller than ordinary epithelial scales, and were furnished with large nuclei and nucleoli. Lebert and Hanover have both noticed the two forms of cancer intermingled.

BLOODY TUMOR OF THE NECK.

Dr. Conant presented a tumor removed from the neck of a patient at the clinic of the Medical Department of the University of Vermont, with the following history:—

J. B. G., aged sixty-five, presented himself May 30th to Dr. C. for advice in regard to a tumor situated on the right side of the neck. Upon careful examination the tumor was found to rest directly upon the common carotid artery from its commencement to the bifurcation. The sterno-cleido-mastoid muscle was crowded considerably outward, but rested upon a portion of the tumor. The omo-hyoid muscle could be distinctly felt traversing the tumor upwards and inwards, while the trachea and œsophagus were crowded considerably to the left side, so that breathing and deglutition were somewhat interfered with. This patient had consulted several surgeons, who had unanimously advised against an operation for its removal. The tumor had existed some five years, but had grown nearly one half during the past six months, and was beginning to trouble the patient so much that he had fully determined to have it removed. Professor Thayer and Dr. Steavens of Saint Alban's were requested to see the patient, when it was determined, after advising the patient of the dangers, to attempt the operation at the clinic on the following day. Dr. Hall of Saint Alban's, his family physician, was informed of the decision, and came to town to witness and assist in the operation. On Saturday the 31st, after disposing of other patients and operations, Mr. G. was placed upon the table, and ether administered by Dr. Hall. When the patient was fully under its influence, an incision was made over the median line of the tumor its whole length, carefully dissecting down with the grooved director through the superficial tissues. On arriving at the tumor, the forefinger was carried down under the lower end, when the pulsations of the arteria innominata could be distinctly felt. The tumor did not seem to be adherent to the carotid. The finger was then carried over the upper end of the tumor and down behind it, when the pulsations of the carotid were also distinctly felt. The two forefingers then swept the sides of the tumor, enucleating the whole mass completely from its bed. The whole operation occupied only thirteen minutes. Upon removing the pressure from the common carotid, the pulsations were extremely vigorous, producing a decided impression upon the whole right side of the neck. The hæmorrhage was considerable, and it was with difficulty that it could be controlled. After a long search it was found to come from a large branch of the superior thyroid artery, which had been the nutrient branch of the tumor. The perchloride of iron in solution was used to control the capillary hæmorrhage. From this the patient progressed favorably, and just three weeks after the operation returned home to his family.

Professor Stiles made a microscopical examination of the tumor, and found it to be a vascular degeneration of one of the deep cervical sympathetic glands—sometimes called bloody tumor of the neck.

Dr. Conant also presented a large tumor removed from the side of a female, with the following history. Miss A., aged thirty-six years, presented herself before the Medical Class in the University of Vermont on the day of the above operation, with a large tumor attached to the right side from the median line in front, to the median line behind over the crest of the ilium. The tumor was attached by a pedicle about sixteen inches long and four to five deep, and hung as low as the knee of the patient. It was somewhat pear-shaped, with the large extremity down, and was so heavy the patient had to lift it over herself when she wished to turn in bed. It was estimated that the mass would weigh thirty pounds.

The patient was just convalescing from measles, and it was thought best to take a week for preparation before attempting an operation for its removal.

ENORMOUS TUMOR OF THE SIDE.

She was again before the class on the fourth of the present month, when ether having been administered by Prof. Stiles, Dr. C., assisted by Prof. Allen and others, commenced the operation by first inserting strong bobbin through the entire pedicle at short distances, tying very tight the different sections as a precaution against hæmorrhage. Dr. C. had proposed for this purpose an iron screw clamp, but not being able to get one manufactured in season, adopted the above method; but the ligatures were not all satisfactory, as they were constantly giving way during the manipulation of the tumor, so that more than half of them were

broken before the operation was completed. The tumor was removed with the écraseur of Chassaignac, dividing the pedicle into parts as large as the chain would surround; it required six segments to divide the whole. The hæmorrhage was very slight from the side of the patient, but the veins were numerous and large, and the hæmorrhage from the cut surface of the tumor was so great that they were obliged to be ligatured during the progress of the operation. The time consumed in removing the entire mass was two hours and ten minutes. The surface uncovered was some sixty-four square inches. The lips of the wound were brought together by strong sutures, and the patient removed to the anteroom; some hæmorrhage appearing, the wound was opened, and one bleeding vessel secured, after which there was no more trouble. She was removed on a lounge by members of the class to her boarding-house, and carefully watched three days. No unpleasant symptom arose, dry clothes only were kept applied to the wound, which healed by first intention for about four-fifths of its length. The rest suppurated and healed by granulation, and the patient returned home the second week after the operation. The patient was very thin and small in stature, weighing only about one hundred pounds before the operation. The tumor weighed twenty-five, so that one-fourth the entire weight was removed. Microscopic examination proved the diagnosis to be correct, and the tumor to be a hypertrophied integumental corium of a fibroma. The patient has numerous small ones in the skin over the body, and proposes to come down each spring and have the largest one removed.

American Medical Times.

SATURDAY, OCTOBER 18, 1862.

OUR DISPENSARY SYSTEM.

The sick poor of New York city have for more than seventy years enjoyed the benefits of medical charity in the shape of an organized dispensary system. Nothing has been spared in time, influence, or money, on the part of those philanthropic citizens who have taken an interest in these charities, to make them as comprehensive as possible. Numerous important suggestions have been carried out, and very many improvements made; and though there be room for many more, we have the gratification of knowing that we have as perfect and efficient an organization as can anywhere be found. With the rapid growth of our city and the large immigration of the poorer classes, gradually increased demands have been made upon us for the provision of the needy; and at present we can point to no less than six of these institutions which alike do honor to their common mother, the New York Dispensary.

It is the gratifying privilege of the medical philanthropist to look back and count the great benefits which the community have derived from the outlay of money on the one hand and professional talent on the other. Aside from the relief to the poor in the abstract, the public owe to the dispensaries a debt of gratitude which can scarcely be appreciated.

It was only ten years after the foundation of the old City Dispensary that vaccination was offered every inhabitant of this city, and since that time the practice has been steadily kept up. The number of lives that have been saved, and the great check which vaccination has had upon the spread of the disease, can only be appreciated by comparing the statistics of the present day with those which were in existence before the great discovery of Jenner. The proportionate number who are vaccinated is increasing yearly, and we may soon hope to see the time when everyone shall wear the vaccination scar. If it were not for dispensaries where would have been obtained the vast supplies of virus that have been sent to our armies? The government appealed to these institutions in the emergency, and there was a prompt compliance with the demand. That part of the community, too, who do not belong to the class for which the charities are intended, are indirectly through their physicians dependent upon them for a supply of good vaccine virus. The care which the house physicians of the different institutions exercise in the selection of good points and scabs, and the character for reliability which they have deserved, is such, that our most substantial practitioners have been induced to rely upon them almost altogether for supplies.

Some time since we alluded to the objection which the trustees of our dispensaries had to the treatment of primary syphilis in these institutions. We now, however, understand that all objections to this measure have been removed, and that this class of unfortunates is properly cared for. It has been claimed by many that this will have a tendency to spread the vice by offering to those who are the victims of it, a safe and cheap cure. We cannot see the validity of this argument. The disease is shunned by every one, because there is a fear of it; and we cannot conceive of any one who is foolhardy enough to willingly run any risk of infection. Notwithstanding this fact, however, we see that illicit intercourse is still indulged in, each one hoping to escape disease—but it is only by virtue of this hope that he is willing to brave the risk. We cannot prevent the practice, but it is in our power to mitigate its effects. By timely treatment we eradicate the disease in that individual, save his constitution, and prevent the infection of others. That part of our duty seems plain enough. With the moral aspects of the question, however, we have nothing to do; neither do we consider it just that the trustees should assume all responsibility in the matter. Let us look at this question in another point of view. If we refuse to treat primary syphilis, constitutional symptoms will supervene, i. e. in most cases, and the remedies which must be used are not only expensive, but have to be long continued. For the primary sore only a drop or two of nitric acid or an application of nitrate of silver may be all that is required. It has been urged, too, that from these patients some remuneration should be exacted, inasmuch as the supposition is that they have necessarily made some outlay to expose themselves to the disease. Now, we know that the vast majority of such patients will sooner trust to some of the many quack nostrums than pay a medical man for advice. Hence, the disease too frequently takes its own course. This being the case the trustees, for want of a better one, must take the only course that is left, namely, the substitution of the lesser evil, the lack of remuneration, for the greater one, the spread of the disease. We believe, then, that the treatment of primary syphilis in our dispensaries will be productive of an immense deal of good. Another good effect of the dispensary system is apparent in the encouragement which it indirectly offers to labor, by treating so many as transient patients. Laborers, poor mechanics, and others who by virtue of their ailments can barely eke

out a sustenance, are thus kept in their situations. The public have the value of their services, and the poor patient a certain amount of remuneration which would all be stopped if the treatment were carried on in any one of our hospitals.

Let us briefly glance, in conclusion, at the effects of the dispensary system upon the profession as a body. The advantages for practice are so obvious, and the facilities which are offered for the study of specialties are so apparent to every one, that they need from us only a passing allusion. Our most distinguished metropolitan physicians have built up the foundation of reputations by the connexion which they have formerly held with these very institutions.

It has been supposed that dispensary practice was very apt to bestow medical advice on many of those who were not really needy. That there are too many instances where the plea of poverty is unjustly taken advantage of we cannot deny; but we will undertake to say, that the value of such practice is fully made up to the physician by the salary which he receives. Again, aside from professional advancement and the like, the physician has a higher remuneration, paid in the coin of heartfelt thanks from his patients, which, as they accumulate upon his hand, give him the proud satisfaction of having proved the meaning of the saying in Scripture: "I was sick and ye visited me."

THE WEEK.

The Commission appointed by the Surgeon-General to devise a method of expending the fund appropriated by Congress for the purchase of wooden limbs for soldiers, recently held a meeting in this city. It consisted of the following eminent surgeons: Drs. Van Buren, Gross, J. M. Warren, and Satterlee. After examining the subject they resolved to allow the patient fifty dollars for a lower, and twenty-five dollars for an upper extremity. The following artificial limb manufacturers were selected to supply limbs, viz. Dr. E. D. Hudson, New York, Dr. Douglas Bly and Mr. Selpho, New York, Mr. Douglass, Springfield, Mass., and Mr. Palmer, Philadelphia. The patient is at liberty to apply to either of these manufacturers, but if the price which they demand for a given limb exceeds the amount allowed, the patient, or his friends, must make up the deficiency. This arrangement is very judicious, and will lead to a proper use of the fund. Every maimed soldier will be able to obtain an artificial extremity of such quality as he chooses.

—

By a circular recently issued it appears that the Sanitary Commission has undertaken a special inspection of all the general hospitals of the army. It is estimated that there are not far from one hundred of these hospitals, with an aggregate of fifty thousand patients. We anticipate much good from this inspection. Our military hospitals are rapidly assuming more and more importance in the history of this war, and their management now interests nearly every family in the loyal States. To nothing is the community more sensitive than the constantly renewed reports of improper treatment of the soldiers in hospitals. While many of these reports are false, and often even absurd, some are founded in truth. Constant vigilance can alone secure the proper management of these institutions, and this must be secured by inspection. We notice that Dr. Henry G. Clark, of Boston, has been appointed Chief of the Corps of Inspectors, and that Drs. Bowditch and Ellis, of Boston, are already engaged in their duties.

—

In another column will be found the list of surgeons for the examination of persons claiming exemption, under the draft, for disability, appointed for the State of New York. It will be seen that the list embraces the names of the best known physicians of the State. This selection reflects great credit upon Surgeon-General Vanderpoel, who has been unwearied in his efforts to secure the right man for the right place.

—

We regret to notice the retirement of some of the older and most respectable members of the Medical Staff of the Volunteer Corps of the army. Dr. Crosby, of New Hampshire, resigned the situation some months since of Brigade-Surgeon. Recently, Dr. David Prince, of Illinois, an eminent surgeon of the West, also resigned his position of Brigade-Surgeon. Within the last few days Dr. John B. Trask, formerly Editor of the *Pacific Medical and Surgical Journal*, but recently Surgeon-in-Charge of the Finley Hospital, Washington, has retired from the service. The army cannot well spare the services of such men at this time. The two former have maintained a high reputation on the field, and the latter was one of those rigid disciplinarians who give to hospital management that precision which should characterize a military establishment. The former gentlemen return to their professional pursuits; and Dr. Trask will resume his connexion with the Medical Journal, which he had long conducted with eminent ability.

—

We have to announce the death of another of our oldest and most respected physicians. Dr. John C. Cheesman died on Saturday, Oct. 11th, in the 75th year of his age, at his residence, No. 230 Fifth Avenue. Dr. Cheesman has long occupied a prominent position in the profession of this city. He was for many years a surgeon of the New York Hospital, and a trustee of the College of Physicians and Surgeons. He was a very successful practitioner, and for a long period enjoyed a large and lucrative practice.

Correspondence.

MEDICAL PRESCRIPTION WRITING.

[To the Editor of the American Medical Times.]

Dear Doctor:—If a thirty years' devotion to the practice of Pharmacy will justify the appeal, may one ask for the use of your columns to catch the eye, and perchance awaken the attention of Medical Practitioners, to the importance of intelligible Prescription Writing; for a reference to any Apothecary's Prescription file will show that in too many cases little or no consideration is given to the subject. If the labor I am about to assume be a thankless one, or if it be displeasing to some (which I would regret), I can only plead for the reputation of the Apothecary, and against any unnecessary risk of human life, as my motives, and if need be my excuse.

Doctors, like other men, are creatures of habit, but the responsibility of their calling, and the necessary exercise of a careful and minute investigation into the nature and cause of disease, should induce a corresponding habit of distinctly prescribing the remedial agents on which they must rely, and without which a mere diagnosis of the disease will avail but little, in its cure. It is a noticeable

fact, that much of the evil alluded to arises from the deficient quantity and quality of the paper on which prescriptions are frequently written.

Many physicians depend on the kind of paper that chance may throw in their way when it is needed, acting upon the idea that any kind will do for prescriptions; but a moment's reflection will satisfy the most unthinking that these media of life or death demand more careful attention. What doctor would willingly accept a promissory note, illegibly written on the margin of a newspaper, on a scrap of brown wrapping paper, on the corner of a second-hand envelope, or on a dirty blue tobacco wrapper? and yet each of these, in medical hands, has played the important part of prescription-bearing. This condition of things is clearly chargeable to inadvertence on the part of the physician; his attention perhaps has never before been called to it, for paper is too cheap an article to suppose that he could be influenced by any economic view of its cost.

What surgeon having a limb to amputate would inadvertently leave the proper instruments at home, and resort to the use of a carving knife or other domestic tool? He certainly would take pains to provide himself with every facility for the occasion; and is it not equally incumbent on the physician to provide himself with all that is essential to intelligible prescription-writing. On the principle that "like generates like," indifference to writing-paper begets a like indifference to writing; and hence, prescriptions often degenerate into mere arbitrary ciphers, a series of crotchets and quavers, that leave to the imagination of the apothecary an open scale from aq. font. to aq. fort. The quirks and squirms intended to characterize drachms are embellished into ounces, and those intended for ounces are curtailed to drachms. To accommodate the prescription to the paper at hand, abbreviations are contracted until t. s. t. d. may either represent "a teaspoonful thrice a day," "a teaspoonful twice a day," or any other change upon the initials that the fancy of the apothecary may suggest.

In fact, the writer has received prescriptions so confusedly crowded on a shapeless bit of paper, as to have suggested even to the mind of the physician writing them, the necessity for a verbal explanation through the patient to the apothecary, of what he (the physician) had written, and in other cases, what he had omitted to write for want of room. These methods are so incompatible with common sense as to increase rather than diminish the perplexity attending them.

From another noticeable fact, borne out by long observation, that the prescriptions of properly educated young physicians are not, as a rule, open to these objections, we may clearly infer that they do not exist from any defective education, but are acquired with increasing years and practice, and perhaps through overweening confidence in the guessing qualities of the apothecary.

I may be charged with attempting to make a bolus out of a granule, and it may be inquired to what percentage of the medical practitioners do these strictures apply? I answer, to those who may feel their personal force; the percentage is not material. If there be but one, and he either cannot or will not avoid these evils in prescribing, I would respectfully advise him, for the sake of suffering humanity, not to intrust his patient to the chances of his written prescriptions. Better return to the saddle-bag practice, and the primitive rule of linear measurement in apportioning his doses, by administering powders per inch from the blade of a jack-knife, and fluids per finger from any convenient vessel, or to the more solid cubic measurement of pinches for potencies, and handfuls for simples, thereby avoiding any division of responsibility. Such advice, coming from a thirty years' experience in pharmacy, I think proves conclusively that its practice tends to foster an unselfish conviction of duty, with a strong desire to perform its requirements. Before severing this, my novel connexion with the profession, let me ask the doctor who accompanies his prescription for ten grains of calomel with the verbal request that the quantity be increased to full ten and a half grains bordering on eleven, what he contemplates when he directs tea and tablespoonful and wineglassful doses, as it may be said there are no two sets of the same capacity. If he views the terms synonymous with drachm and its multiples, I will take the occasion to remark that apothecaries have glasses accurately graduated with these synopses for domestic use, but their utility requires the doctor's endorsement, before they can be generally introduced, as no lady can otherwise see it. This is but another phase of inadvertence; and as I possess neither the stoicism of a Diogenes nor the philosophy of a Paley, policy advises me to retire to the unpretending duties of the

APOTHECARY.

DEATH OF AN ARMY SURGEON.

[To the Editor of the AMERICAN MEDICAL TIMES.]

On Wednesday, Sept. 17th, near Sharpsburg, Doctor WILLIAM J. H. WHITE, in the 36th year of his age.

Dr. White was a native and resident of this city, and entered the U. S. Army about fifteen years ago, after completing his studies at Washington. He was soon after ordered to the far west, where for years he was unceasingly employed in the arduous duties of his profession on the frontier. At the time of his death he was the Medical Director of Maj.-Gen. Franklin's Corps, and was killed in the early part of the great battle fought in the vicinity of Sharpsburg. We think we can truly say that no officer in the Medical Staff was more respected and beloved by his associates than was Dr. White, and none was more conscientious and constant in the performance of all the responsible duties incident to his profession. Dr. White's manners and disposition were so modest and unobtrusive that his sterling qualities could not be appreciated except by those who knew him well. He possessed the most delicate sense of honor, and most thoroughly fulfilled through life his duty as a son, as a brother, as an officer, and as a man. His aged parents, whose only support he was for years, still survive to mourn his early death.— *Washington Intelligencer.*

During the summer and autumn of 1861, Surgeon White was in charge of the Infirmary Hospital in Washington city, and after the destruction of that building by fire in Nov. last, he was transferred to the General Hospital "Eckington," situated a mile north of the Capitol. He officiated on the "Medical Examining Board" in session in Washington, for the examination of Assistant Surgeons and Brigade Surgeons, until July last, when he was ordered to the field in Gen. McClellan's army, then on the Peninsula.

The funeral services, which were of a most impressive character, took place in Ryland Chapel, Washington, on Sunday the 21st ultimo, and were attended by the Surgeon General of the Army, the Medical Purveyor of the Military District, and by a large concourse of other officers together with citizens. Two companies of a Penna. Regt. acted as an escort to the cortège, and fired a volley over his grave.

L. H. B.

IS ELECTRO-MAGNETISM AN ANÆSTHETIC?

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In a previous number of the *American Med. Times* you notice a new inhaler, by means of which parturition can be made painless. I have also read an article in an English periodical which, while reviewing the means heretofore employed for the purpose, all of which it stated to have been ineffectual, ascribes great virtues to some favorite prescription, which the writer of that article always employs, and which he asserts is the only remedy adapted for the purpose. This is erroneous.

I have for two years past, whenever opportunity offered, employed electro-magnetism as an anæsthetic, and in many surgical operations, but particularly in parturition, it has fully served my purpose. I may not be the first one to employ this agent for the purpose, yet I have never seen it

employed as an anæsthetic exeepting in the extraction of teeth. This first attracted my attention and led me to making experiments.

The maker of the electro-magnetic machine which I have used, Amos Brown, claims, and my experience proves, that none but a direct current, viz. a current having a specific polar action, running only in one way, will act as an anæsthetic. It would seem that the positive pole of the direct current being in the patient's hand the current passes up the arm to the nervous centre, and from thence along the nerve nearest to the place where the negative pole of the current is applied, and thus returns to the battery. It is also claimed that it passes along both the nerves of motion and those of sensation, and while so doing that it neutralizes the sensation of pain which may exist in the nerve through which it passes.

Let this be as it may, I have found that by connecting a bistoury with the negative pole of the direct current of an electro-magnetic machine, and placing the positive pole into the patient's hand, or attached to the foot, the handle of the bistoury being insulated, I can cut around the most sensitive parts, no other sensation than that produced by the current, which patients describe as "a pricking like needles and pins," is felt.

In the same way the negative pole being applied at and around the sacrum in order to reach the ganglions supplying the uterus, and the positive pole being held in the patient's hand, the pain of parturition is to a very great extent neutralized. Patients express themselves pleased with the sensation substituted, and all perceive and acknowledge that electro-magnetism, thus applied, is at least a relief from the usual pain, if not a complete anæsthetic. With slight modifications in the manner of applieation we all know it will assist contractions, and by reflex action produee relaxation of the os.

Would it then not be worth the time and attention of the profession to give electro-magnetism a fair test in this regard? It has done duty as chloroform and ergot for me. Is it not safer and less unpleasant?

Resp'y,
H. Lassing, M.D.

No. 288 9th Ave., N. Y., Sept. 22, 1862.

LOGWOOD AS A DEODORIZING AGENT.

[To the Editor of the American Medical Times.]

Sir:—I wish through the Medieal Times to eall the attention of the profession to Logwood (Hematoxylon Campechianum) as a valuable deodorizing agent.

A knowledge of its value seems to be more partieularly desirable at this time when so many of our soldiers are suffering from sloughing and gunshot wounds. A simple aqueous solution of extract of logwood applied to such wounds will effectually do away with all offensive odor arising therefrom. In cancerous ulcerations it is equally valuable; and in cancerous disease of the uterus, that most horrible of all diseases of women, it may be used in the form of injections with complete success in removing the terrible odor which always accompanies such disease.

Yours, &c.,
H. G. Westlake, M.D.

Hillsdale, N. Y., Oct. 6th, 1862.

Army Medical Intelligence.

LIST OF THE NAMES OF SURGEONS AND ASSISTANT SURGEONS APPOINTED TO THE VOLUNTEER REGIMENTS OF THE STATE OF NEW YORK, SINCE MAY 31, 1862, AND THE CHANGES WHICH HAVE OCCURRED IN THE REGIMENTS IN THE FIELD FROM THE SAME DATE.

June 2.—Ephraim W. Buck, Assist. Surgeon 9th Regt., vice John P. S. White, promoted to Surgeon 10th Regt. June 18.—John M. Forshee, Surgeon 66th Regt., vice Wm. J. McDermott, resigned, promoted from Assist. Surgeon 11th Regt. June 14. Charles N. Hewett, promoted from Assist. Surgeon 50th Regt., to Surgeon same Regt., vice H. A Potter, resigned; George W. Lovejoy, promoted from Assist Surgeon 4th Regt., to Surgeon same Regt., vice D. W. Wainwright, promoted; Abraham Welch, Assist. Surgeon 4th Regt., vice Geo. W. Lovejoy, promoted. June 23.—Michael Hillary, Assist. Surgeon 50th Regt., vice Charles N. Hewett, promoted. June 25.—Buel G. Streeter, Assist. Surgeon 8th Cavalry, vice Geo. H. Bennett, resigned. June 27.—Adelrich Steinach, Assist. Surgeon 103d Regt., vice John B. Kruenter, resigned. June 30.—Pitkin B. Rice, Surgeon 2nd Regt. "Spinola Brigade" (new Regt.).

July 2.—William H. Tanner, promoted from Assist. Surgeon 47th Regt., to Surgeon same Regt., vice Morris W. Townsend, resigned; David M. Brown, Assist. Surgeon 47th Regt., vice Wm. H. Tanner, promoted. July 3.—Franklin B. Hough, Surgeon 97th Regt., vice L. J. Marvin, resigned. July 9.—Myron J. Davis, Assist. Surgeon 1st Artillery, vice Edward McDowell, promoted to Brigade Surgeon. July 14.—Lucius P. Woods, promoted from Assist. Surgeon 5th Cavalry, to Surgeon same Regt., vice John R. Cooper, resigned; William H. D. Parsons, Assist. Surgeon 5th Cavalry, vice L. P. Woods, promoted. July 16.—William H. Knilson, promoted from Assist. Surgeon 15th Regt., to Surgeon 9th Cavalry, vice John Spencer, resigned; T. B. Gilbs, Assist. Surgeon 15th Regt., vice W. Knilson, promoted. July 18.—William Rockwell, Surgeon "Stanton Legion" (new Reg.); Fletcher M. Hammond, Surgeon 26th Dist Regt. (new Regt.). July 17.—H. Ayme, Assist. Surgeon Col. Pelsner's Regt., New York City (new Regt.). July 19.—Patrick H. Flood, Surgeon 16th Dist. Regt. (new Regt.); James O. Van Hoevenberg, Surgeon 31st Dist. Regt. (new Regt); Hiram H. Ingerson, Assist. Surgeon 15th Dist. Regt. (new Regt.). July 21.—James M. Lest, Surgeon 29th Dist. Regt. (new Regt.). July 22.—George E. Cutler, Surgeon Col. Gurney's Regt., New York City (new Regt.); Julius C. Rappold, promoted from assist. Surgeon 52d Regt., to Surgeon same Regt., vice Geo. C. Shieldsmith, promoted; Dr. Jos. Reuss, Assist. Surgeon 52d Regt., vice Julius C. Rappold, promoted. July 23.—James E. Pomfret, Surgeon 13th Dist. Regt (new Regt); S. P. Valentine, Assist. Surgeon 20th Dist. Regt. (new Regt.); Morris J. Franklin, Surgeon 4th Cavalry, promoted from Assist Surgeon same Regt., vice Adolph Maser, resigned; Martin Brann, Assist. Surgeon 4th Cavalry, vice Morris J. Franklin, promoted. July 24.—Nathan R. Tefft, Surgeon 22d Dist. Regt. (new Regt.). July 25.—Geo. De Landre, Assist. Surgeon 1st Emp. Brigade (new Regt.); William Vosburgh, Surgeon 25th Dist. Regt. (new Regt.). July 28.—William S. Cooper, Surgeon Rensselaer Co. Regt. (new Regt.) July 23.—Nelson Fanning, Surgeon 44th Dist. Regt. (new Regt.). July 28.—John H. Thompson, Surgeon 9th Dist. Regt. (new Regt.). July 28.—Benj. T. Kneeland, Surgeon 88th Dist. Regt. (new Regt.). July 29.—Paluat De Marmou, Surgeon 3d Regt., Emp. Brigade (new Regt.); Allen C. Livingston, Surgeon 21st Dist. Regt. (new Regt.); Edward Loomis, Surgeon 19th Dist. Regt. (new Regt.); Levi P. Wagner, Surgeon 31st Dist. Regt. (new Regt.). July 30.—George W. Metcalfe, Assist. Surgeon 76th Regt. promoted to Surgeon same Regt., vice Judson C. Nelson, resigned; William H. Lakeman, Assist. Surgeon 76th Regt., vice G. W. Metcalfe, promoted; Augustus Leverit, Assist. Surgeon 3d Batt. Artillery, vice Geo. Wieber, resigned; Charles E. Washburne, Surgeon 32d Dist. Regt (new Regt.); Allen S. Heath, Surgeon 3d Dist. Regt (new Regt.). July 31.—Samuel E Elliott, Assist. Surgeon 63d Regt., vice Aug. D. Ruggles, resigned.

Aug. 1.—Benj F. Harrison, Surgeon "Independent Battalion;" Chauncey R. Hutchins, Surgeon 31st Dist. Reg. (new Reg.). Aug. 5.—John F. Whitlock Surgeon 28th Dist. Regt. (new Regt.); Fr. Aldershaus, Assist. Surgeon 7th Regt. Aug. 6.—William E. Trowbridge, Surgeon 18th Dist. Regt. (new Regt.). Aug. 7.—James D. Benton, Assist. Surgeon 25th Dist. Regt. (new Regt.); Orsamus Smith, Assist. Surgeon 10th Regt.; James D. Hewett, Assist. Surgeon 27th Dist. Regt. (new Regt.); Lysander W. Kennedy, Assist. Surgeon Washington Co. Regt. (new Regt.); Charles C. Murphy, Assist. Surgeon 16th Regt., vice John H. Rovers, promoted; David McFails, Assist. Surgeon 106th Regt. (new Regt.); William A. Madill, promoted from Assist. Surgeon 23d Regt., to Surgeon of the same, vice Churchill, resigned. Aug. 8.—Bradford S. Manly, Assist. Surgeon 84th Regt.; Jared G. Wood, Surgeon 8th Dist. Regt. (new Regt.). Aug. 9.—Samuel Hart, Surgeon 24th Dist. Regt. (new Regt.); A. D. Benedict, Assist. Surgeon 1st Regt.; George C. Douglas, Assist. Surgeon 4th Regt.; John Fisher, Assist Surgeon 6th Regt.; George Steinert, Assist. Surgeon 29th Regt.; Emil Steiger, Assist. Surgeon 39th Regt.; Henry E. Crampton, Assist. Surgeon 9nd Regt.; Peter E. Sickler, Assist. Surgeon 44th Regt.; Frank Grimes, Assist. Surgeon 5th Regt.; William L. Harding, Assist. Surgeon 9th Regt.; William E. Johnson, Assist. Surgeon 24th Dist. Regt. (new Regt.). Aug. 4.—Palmer C. Cole, Surgeon 11th Dist. Regt (new Regt.). Aug 11.—David G. Himrod, Assist. Surgeon 27th Dist. Regt. (new Regt.); Pierre D. Pettier, Assist. Surgeon 26th Dist. Regt. (new Regt.); Charles S. Hoyt, Assist. Surgeon 50th Regt. (new Regt.); Seth H. French, Assist. Surgeon 24th Dist. Regt. (new Regt.); Calvin Skinner, Surgeon 106th Regt (new Regt.); Isaac V. Mullen, Assist. Surgeon 13th Regt.; Charles J. Kipp, Assist. Surgeon 29th Regt.; Philip W. Shufelt, Assist. Surgeon 14th Regt.; Charles A. Burbeck, Assist Surgeon 60th Regt.; Austin G. Thompson, Assist. Surgeon 1st Cavalry; Frank J. Mattimare, Assist. Surgeon, 18th Regt. Aug. 12.—Charles F. B. Ebner, Surgeon 103d Regt., vice T Lewis Hedler, resigned; A. H. Cochrane, Assist. Surgeon 15th Regt; Benjamin S. Catlin, Assist. Surgeon 2d Regt.; George W. Earll, Assist. Surgeon 81st Regt., Lyman W. Bliss, Assist. Surgeon 10th Cavalry; J. Newton Goff, Assist. Surgeon 17th Regt.; John M. Palmer, Assist. Surgeon 85th Regt.; Charles B. Fry, Assist. Surgeon 21st Regt. Aug. 18.—Edward Boyd, Assist. Surgeon 32d Dist. Regt. (new Regt.); William S. Ely, Assist. Surgeon 25th Dist. Regt. (new Regt.); Samuel Ingraham, Assist. Surgeon 19th Dist. Regt. (new Regt.); David Parker, Assist. Surgeon 1st Artillery, vice Lt. Reed, Assist. Surgeon 75th Regt.; Horace L. Banks, Assist. Surgeon 30th Regt. Aug. 14.—Horatio S. Hendee, Assist Surgeon 18th Dist. Regt. (new Regt.); Wesley Blaisdell, Assist. Surgeon 13th Dist. Regt. (new Regt.); Henry G. Beardsley, Assist. Surgeon 23d Dist. Regt (new Regt.); William H. Stuart, Assist Surgeon 27th Regt.; George C. Bennett, Surgeon Col. Dodge's Regt., Mounted Rifles; John O. Sisson, Assist. Surgeon 22d Dist. Regt (new Regt.). Aug 15.—Henry C. Hendricks, Surgeon 2d Regt., 2nd Dist. (new Regt.); John H. Movers, Surgeon 16th Dist. Regt. (new Regt.); Max Tissot, Assist. Surgeon 8th Regt.; Nelson Rounds Barnes, Assist Surgeon 76th Regt.; Warren A. Talmadge, Assist. Surgeon 25th Regt.; James H. Sisson, Assist. Surgeon 32d Regt.; Richard Curran, Assist. Surgeon 83d Regt. Aug. 16.—John B. Hall, Assist Surgeon 24th Regt. Aug. 18.—Leonard M. Johnson, Assist. Surgeon 3d Regt.; Charles H. Richmond, Assist. Surgeon 104th Regt.; Ichabod H. Searl, Assist Surgeon 36th Regt.; Thomas Cushing, Assist Surgeon 25th Regt.; Joseph P. Stewart, Assist. Surgeon 31st Regt.; Frank D. Beebe, Assist. Surgeon 2d Regt., 2nd Dist. (new Regt.); William F. Hutchinson, pro-

moted from Assist. Surgeon 22d Regt., to Surgeon of the same, vice Atherly, deceased; Austin W. Holden, Assist. Surgeon 22d Regt., vice William F. Hutchinson, promoted. Aug. 19.—J. Harry Thompson, Surgeon Col. Conk's Regt. (new Regt.); Bleeker S. Hovey, Surgeon 2d Regt., 30th Dist. (new Regt.); Cornelius H. Murphy, Surgeon 1st Legt. Empire Brigade. Aug. 20.—D. Stewart Hopkins, Assist. Surgeon 25th Dist. Regt. (new Regt.); Daniel P. Van Vleck, Assist. Surgeon 11th Dist. Regt. (new Regt.); James Hadden, Assist. Surgeon 95th Regt.; Wm. H. Cruikshanks, Assist. Surgeon 9:d Regt.; Oliver S. Copeland, Assist. Surgeon 18th Dist. Regt. (new Regt.); Richard E. Sutton, Surgeon 15th Dist. Regt., (new Regt.); William P. Buel, Surgeon 1st Regt., Metropolitan Guard (new Regt.); Henry Van Aernam, Surgeon 2d Regt., 32d Dist. (new Regt.); Samuel Peters, Assist. Surgeon 10th Dist. Regt. (new Regt.); Charles H. Porter, Assist. Surgeon 40th Regt., vice Charles E. Halsey, deceased. Aug. 19.—Obadiah Rogers, Assist. Surgeon 40th Regt.; Washington Aiken, Assist. Surgeon 12th Dist. Regt. (new Regt.); Henry H. Beecher, Assist. Surgeon 1st Regt., 23d Dist (new Regt.); J. Mortimer Crane, Assist. Surgeon 2d Regt. 29d Dist. (new Regt.); Horatio E. Gates, Assist. Surgeon 80th Regt.; Albert L. Turner, Assist. Surgeon 56th Regt.; Henry W. Carpenter, Assist. Surgeon 117th Regt., 19th Dist. (new Regt.); Clarence Ewen, Assist. Surgeon 53d Regt.; Edwin A. Knapp, Assist. Surgeon 22d Dist. Regt. (new). Aug. 21.—William M. Bryce, Assist. Surgeon Delaware Co. Regt. (new); Henry Collier, Assist. Surgeon 120th Regt., 10th Dist.; John N. Freeman, Assist. Surgeon 5th Regt., vice Owen Munson, resigned; Hartwell C. Tompkins, promoted from Assist. Surgeon 61st Regt. to Surgeon of the same, vice Samuel R. Welles, resigned; John N. Lyman, Assist. Surgeon 61st Regt., vice Tompkins, promoted; James B. Carpenter, Assist. Surgeon 35th Regt.; Edmund G. Derby, Assist. Surgeon 94th Regt.; Griffin Reno, Assist. Surgeon 66th Regt. Aug. 22d.—Joseph W. Robinson, Surgeon 2d Regt., 27th Dist. (new Regt.); Thomas Avner, Assist. Surgeon 108th Regt., 28th Dist. (new Regt.); Theodore F. Hall, Surgeon 24 Regt., 28th Dist. (new Regt.); James V. Kendall, Surgeon 2d Regt., 22d Dist. (new Regt.); Henry M. Eidsell, Surgeon Sullivan Co. Regt. (new); C. H. Andrews, Assist. Surgeon 11th Dist. Regt. (new); George V. Skiff, Assist. Surgeon 4th Artillery; O. Spragne Paine, Assist. Surgeon 2d Regt., 28th Dist. (new Regt) Aug. 23d.—Andrew J. Willets, Surgeon 53d Regt.; John Hurley, Assist Surgeon 53d Regt.; Norman L. Snow, Assist. Surgeon 2d Regt., 15th Dist. (new Regt.); William Bassett, Surgeon 74th Dist. Regt. (new); James G. Forrester, Assist. Surgeon 118th Regt., 16th Dist. (new Regt.); Thomas M. Flandrew, Surgeon 2d Regt., 19th Dist. (new Regt.); Elnathan W. Simmons, Surgeon 2d Regt., 26th Dist. (new Regt.); Matthew F. Reagan, Surgeon Buffalo Irish Regt. (new). Aug. 22d.—John Jenkins, Assist. Surgeon 40th Regt.; Solomon F. McFarland, Surgeon 83d Regt.; James Allen, Assist. Surgeon 89th Regt.; James W. Black, Assist. Surgeon 43d Regt.; Cornelius Sattler, Assist. Surgeon 41st Regt. Aug. 25.—Nelson Neely, Assist. Surgeon 57th Regt.; William S. Young, Assist. Surgeon 47th Regt.; John Wm. Hauk, Assist. Surgeon 46th Regt.; A. Clark Baum, Assist. Surgeon 50th Regt.; David McFalls, Surgeon 2d Regt., 17th Dist. (new Regt.); Frederick H. Petit, Assist. Surgeon 106th Regt., 17th Dist. (new Regt.). 26th.—George C. Smith, Assist. Surgeon 2d Regt., 10th Dist. (new Regt.); Edward Rowland, Asst. Surgeon 127th Regt.; Charles F. Kelsey, Assist. Surgeon 64th Regt. 27th.—Daniel M. Holt, Assist. Surgeon 121st Regt., 20th Dist. (new Regt.); Samuel Ensign, Assist. Surgeon 2d Regt., 28th.—Byron De Witt, Assist. Surgeon 2d Regt., 25th Dist.; Oliver T. Bundy, Jr., Assist. Surgeon Delaware Co. Regt. (new); Robert Watts, Jr., Surgeon Metropolitan Guard (new Regt); Hermon A. Boland, Assist. Surgeon 2d Regt., 17th Dist. (new Regt.); John R. Cotes, Assist. Surgeon 2d Regt., 29th Dist. (new Regt). 29th.—Agenor S. Coe, Surgeon—Regt., 21st Dist. (new Regt); Cornelius N. Campbell, Surgeon Dutchess Co. Regt. (new); Frank W. Doolittle, promoted from Assist. Surgeon 10th Regt. to Surgeon of the 5th. vice Henry C. May, resigned; Uri C. Lynde, Assist. Surgeon 116th Regt., 31st Dist. (new Regt); Silas A. Ingham, Assist. Surgeon 2d Regt., 24th Dist. (new Regt); John C. Wall, Assist. Surgeon Buffalo Irish Regt. (new); Henry H. Carpenter, Assist Surgeon 106th Regt., 17th Dist. (new Regt.); William H. Hoag, Assist. Surgeon 14th Dist. Regt. (new); George D. Bassett, Assist. Surgeon 67th Regt.; Oliver S. Greenman, Assist. Surgeon 2d Regt., 27th Dist., (new Regt.) 30th.—Charles J. Pardee, Assist. Surgeon 16th Regt.; J. R. Mansfield, Assist. Surgeon 13d Regt., 2d Empire (new Regt.); James L. Watson, Assist. Surgeon Col. Conk's Brooklyn Regt. (new); William C. Slayton, Assist. Surgeon 2d Regt., 28th Dist. (new Regt.); Dwight W. Day, Assist. Surgeon 2d Regt., 32d. Dist (new Regt.); James Sanders, Jr., Assist. Surgeon 190th Regt., 30th Dist., (new Regt.); Charles A. Robertson, Surgeon 3d Brooklyn Regt. (new).

QUARANTINE REGULATIONS AT PORT ROYAL, S. C.

HEAD QUARTERS, DEP'T OF THE SOUTH.
HILTON HEAD, S. C., August 19, 1862.
GENERAL ORDERS, No. 128.

THE following Quarantine Regulations for the port of Port Royal, S. C., are hereby established:—

1. Hereafter the Quarantine Grounds will be in St. Helena Sound, at the place designated by a white buoy and flag.

2. It shall be the duty of the Master and Pilot of every vessel coming into this port, from this date, until further orders (excepting pilot boats returning from their ordinary "cruising grounds"), to hoist a signal for the "Health Officer," and to anchor off the inner buoy, there to remain until visited by him.

3. It shall be the duty of the "Health Officer," without unnecessary delay, to visit every vessel made liable to visitation, and ascertain her sanitary condition, and the port from which she sailed; and every vessel having on board any case of yellow fever, small-pox, cholera, or other infectious or contagious disease,—and also every vessel coming from Key West, Havana, or any other port where yellow fever may exist, he shall order to the Quarantine Ground, there to remain as long as he may deem proper.

4. No person shall be allowed to leave the vessel until she has been examined by the "Health Officer," nor will any communication be had with the vessel until she has been so examined.

5. These regulations will be strictly enforced by the "Health Officer." Should there be any deviation therefrom, or should any of the orders given by the Health Officer to such vessels not be strictly carried out, he will report the fact immediately to the Medical Director of this department.

7. Surgeon CRISPELL, U. S. V., is appointed "Health Officer" of this port.

8. Any violation of the above regulations will cause the immediate arrest and imprisonment of the offenders.

By command of
MAJOR-GENERAL HUNTER.

MEDICAL INSPECTORS.—The Medical Inspector-General is stationed at Washington, and, under the Surgeon-General, is charged with the supervision of the sanitary condition of hospitals, camps, garrisons, &c.

The United States is divided into eight districts, to each of which a Medical Inspector is assigned, as follows:—

First District.—All troops and hospitals in Arkansas, Missouri, Iowa, Minnesota, Kansas, and all territories between Rocky Mountains and Mississippi River. Medical Inspector, C. C. KEENEY.

Second District.—Wisconsin, Michigan, Ohio, Indiana, Western Virginia, and Kentucky east of Cumberland River. Medical Inspector, GEO. H. LYMAN.

Third District.—Alabama, Mississippi, Tennessee, Illinois, and Kentucky west of Cumberland River. Medical Inspector, GEORGE T. ALLEN.

Fourth District.—Third, Twelfth, and Seventh Army Corps, and Eastern Virginia, excepting Accomac and Northampton Counties. Medical Inspector, G. H. MUSSEY.

Fifth District.—First, Second, and Fifth Army Corps. Medical Inspector, E. P. VOLLUM.

Sixth District.—Eighth Army Corps, New York, Massachusetts, and Middle Department. Medical Inspector, R. H. COOLIDGE.

Seventh District.—Fourth, Sixth, and Ninth Army Corps. Medical Inspector, LEWIS HUMPHREYS.

Eighth District.—Eleventh Army Corps, Maryland, except Middle Department. Medical Inspector, JOHN M. CUYLER.

CHANGES.—Surgeon JOHN C. DALTON, Jr., U. S. Vols., who has been sick for some time past at Boston, Mass., has been detailed for duty as Medical Director of Transportation at New York city.

Assist. Surgeon A. MAJER, U. S. Vols., has been assigned to temporary duty in Washington.

Surgeon A. T. WATSON, U. S. Vols., is on duty as Med. Director, 2nd Division 9th Army Corps.

Assist.-Surgeon W. A. BRADLEY, U. S. Army, has been performing the duties of Medical Director of Franklin's Corps since the death of Surgeon White, killed at the battle of Antietam.

DR. THOMAS HAMILTON has been placed on temporary duty in Washington, D.C.

Surgeon R. H. ALEXANDER, U.S.A., lately Medical Purveyor to the Army of the Potomac, has relieved Assistant Surgeon J. J. WOODWARD, U. S. Army, in charge of the Patent Office Hospital at Washington, D.C. The latter has resumed his duties in the Surgeon-General's Office of collecting material for a Medical History of the War.

Surgeon J. G. F. HOLSTON, U. S. Vols., has been relieved in the duty of Medical Director of Gen. Grant's command, by Surgeon HORACE R. WIRTZ, U. S. Army.

Surgeon T. H. BACHE, U.S.A., who accompanied General

Williams from Hatteras to the Dept. of the Gulf, has been assigned to duty as Acting Medical Inspector, 6th District.

Surgeon WILLIAM VARIAN, U. S. Vols, has been directed to superintend the preparation of Hospital accommodations at New Albany, Ind.

Dr. S. R. SKILLERN, lately employed at the Emory Hospital, Washington, has been assigned to duty at Philadelphia, Pa.

Medical Storekeeper HENNELL STEVENS has arrived at Cairo, Ill., and entered on his duties.

Medical Cadet JOHN SULLIVAN, Jr., U.S.A., has been appointed Assist.-Surgeon, New-Hampshire Vols.

Assist.-Surgeon M. J. ASCH, U. S. Army, arrived in Philadelphia on the 1st inst. to assume the duty of member of the Army Medical Board for the examination of candidates for appointment as Assist.-Surgeons in the Medical Staff of the U. S. Army.

Assist.-Surgeon J. V. D. MIDDLETON is on duty with the Artillery Batteries of the 9th Corps.

Surgeon A. K. SMITH, U. S. Army, has returned to Philadelphia from Hagerstown, Md., where he was on duty in connexion with the removal of the wounded in the late battles in Maryland. He resumes his duty as Medical Director of Transportation and Inspector of Hospitals, and is also member of the Army Medical Board for the examination of candidates for the appointment of Assist.-Surgeon in the Medical Staff of the U. S. Army.

Assist-Surgeon E. C. STRODE, U. S. Army, has been assigned to duty at the General Hospital, Jackson, Tenn.

Assist. Surg.-Geueral R. C. WOOD was at Louisville, Ky., on the 1st inst. on a tour of inspection in Ohio and Kentucky.

Assist. Surgeons J. H. BILL and C. M. COLTON, U.S.A., have been assigned to duty in the Church Hospitals at Frederick, Md.

Assist. Surgeon H. M. SPRAGUE, U.S A., has been detailed for duty in the office of the Assist. Surgeon-General at St. Louis, Mo.

Assist. Surgeon J. R. GIBSON, U.S.A., is on leave of absence at Germantown, Pa.

Assist. Surgeon ISAAC V. MULLEN, 13th N.Y. Volunteers, lately on duty at Convalescent Camp near Alexandria, Va., has been directed to rejoin his regiment at Fort Corcorau.

Surgeon S. D. FREEMAN, of Kane's Rifles, has been placed on temporary duty at Washington, D.C.

During the absence of Surgeon SIMPSON on leave, the duties of the Medical Director at Baltimore will be performed by Surg. C. W. JONES, U. S. Vols.

Hospital Steward CRANDALL, of the 6th Vermont Vols., has been commissioned as Assist. Surgeon of the 13th Vermont Volunteers.

Hospital Steward ARNOLD STUB, U. S. Army, has been commissioned as Assist. Surgeon of the 90th N. Y. Vols.

Surgeon T. G. CATLIN, U. S. Vols., has been placed in charge of General Hospital No. 5, at Beaufort, S. C.

Surgeon J. D. ROBINSON, U. S. Vols., has been assigned to duty with the Artillery of Slocum's Division.

Surgeon T. M. GETTY, U.S.A., recently in charge of General Hospital, Annapolis, Md., has arrived at Yorktown, Va., and assumed the duties of Medical Director of General Keyes' Corps (5th).

Asst. Surgeon J. H. BAILEY, U.S.A., has arrived at Camp Chase, Ohio, and entered on his duties.

Surgeon PETER PINEO has been assigned to duty as Medical Director 1st Army Corps.

Surgeon FRANK H. HAMILTON, U.S. Vols., recently Medical Director of the Army Corps under General Keyes, has been detailed to take charge of the Central Park Hospital, in New York.

Med. Storekeeper, H. N. RITTENHOUSE, has been ordered to report to the Medical Purveyor at Frederick for duty.

Surgeon JOHN FRIZZELL, 12th Va. Volunteers, having tendered his resignation, has been discharged from the service.

Asst. Surgeon MAXIMILIAN HELLER, 27th Penna. Vols, has been discharged from the service to enable him to accept a commission as Surgeon of the 161st Penna. Vols.

MISCELLANEOUS.—Surgeon-General HAMMOND returned to Washington, and resumed his office duties on the 6th. During his absence, Surgeon JOSEPH R. SMITH, U.S. Army, Acting Surgeon-General, performed his duties.

The Hospital at the City Hall Court Room in Washington has been vacated.

The Hospital at Chestnut Hill, two miles above Philadelphia, near the falls of the Schuylkill, will soon be ready for patients. It will be under the charge of Dr. JOSEPH HOPKINSON, and when completed, will be the largest in the world, accommodating three thousand patients.

In the Army of the South-West, there are now thirty Surgeons absent from their regiments, sixteen of whom are on Staff duty. The evil resulting from the absence of regimental medical officers is a serious one, and often the cause is by no means a good one. There are instances known of gentlemen getting appointed on the Staff of General Officers, with the honorary title of Medical Director, without any duty to do, or law or regulation to justify the detachment of the Surgeon from his regiment.

The hospital accommodations at Baltimore and Philadelphia have been directed to be increased 2000 beds each.

A Medical Officer has been detailed to visit Wilmington, Delaware, to select a suitable building and prepare a hospital in that city.

The movement of the troops under General Grant rendered it necessary to bring all the sick of his army to Corinth, Miss. They numbered two thousand (previous to the battle there), and were distributed in the various hospitals. The wounded at Iuka had also been brought in and were well cared for. They numbered four hundred and one.

On the retreat of the Union troops from the District of the Kanawha, the General Hospital at Gauley was abandoned and the buildings burned. The General Hospital at Charleston, Va., was also abandoned, the sick being removed to Gallipolis, O.

The Medical Purveyor at Cincinnati, Ohio, has been directed to furnish medical supplies on requisition to the new regiments forming in Western Virginia.

There are still three thousand wounded at Frederick, Va.

The bonds required of Medical Purveyors have been reduced to the amount required of Quartermasters—($20,000).

Drs. H. A. BUCK, JOHN O. BRONSON, A. MCMAHON, and JAMES PHILIPS, have declined the appointment of Asst. Surgeon in the U.S. Vols.

Surgeon JONATHAN LETTERMAN, U.S. Army Medical Director, Army of the Potomac, arrived in Washington, and had an interview with the Surgeon-General on the 11th inst.

SURGEONS FOR THE EXAMINATION OF CONSCRIPTS IN THE STATE OF NEW YORK.—The following-named persons have been appointed Surgeons for the several counties, viz.: Albany, John V. P. Quackenbush and Sylvester Willard; Allegany, C. Milford Crandall; Broome, J. G. Orton; Cattaraugus, E. S. Stewart; Cayuga, Edward Hall; Chautauque, Thomas D. Strong; Chemung, Erastus L. Hart; Chenango, Augustus Willard; Clinton, Wm. N. Colt; Columbia, William H. Pitcher; Cortland, George W. Bradford; Delaware, Horatio N. Buckley; Dutchess, Edward H. Parker; Erie, Jno. Trowbridge and James E. Kline; Essex, Henry O. Talmage; Franklin, Theodore Gay; Fulton and Hamilton, Wm. H. Johnson; Genesee, Norris G. Clark; Greene, E. L. Ingersoll; Herkimer, Andrew F. Doolittle; Jefferson, Wm. R. Trowbridge; Kings, Jos. C. Hutchinson, Theo. L. Mason, James M. Minor, Daniel Ayres, T. M. Ingraham, Jno. Byrne, O. H. Smith, George Cochran, Jno. Ordronaux, DeWitt C. Enos, Daniel E. Kissam, Cornelius Olcott C. R. McLellan, C. L. Mitchell, J. A. Brady; Lewis, S. P. Chlein; Livingston, Daniel H. Bissell; Madison, Ira Spencer; Monroe, Azel Backus; Montgomery, Jeremiah Snell; New York, Gurdon Buck, William Detmold, James R. Wood, Robert Watts, Stephen Smith, Thomas M. Markoe, C. R. Agnew, Charles D. Smith, Austin Flint, George F. Woodward, E. R. Peaslee, S. Conant Foster, Wm. H. Thompson, Ernest Krackowizer, John Gallaher, Elery Denison, Samuel S. Purple, P. B. Mauran, Peter Van Buren, B. I. Raphael, Robert A. Barry, Sigismund Waterman; Niagara, Peter P. Murphy; Oneida, J. D. Hopkins, Jr., and Luther Gulteau; Onondaga, William Taylor and H. D. Didama; Ontario, George Cook; Orange, Wm. P. Townsend; Oswego, A. Van Dyck; Orleans, Wm. McKennon; Otsego, Horace Lathrop; Putnam, Frederick D. Lente; Queens, —— Barker; Richmond, Wm. G. Faltc; Rensselaer, Thos. G. Brinsmade and Philander H. Thomas; Rockland, Moses C. Hasbrouck; St. Lawrence, G. F. Cole; Saratoga, Samuel Freeman; Schenectady, Livingston Ellwood; Schoharie, Lemuel Cross; Schuyler, —— Maning; Seneca, Alfred Bolter; Steuben, Stephen Hagadorn; Suffolk, Abraham G. Thompson; Sullivan, John D. Watkins; Tioga, Lucius H. Allen; Tompkins, Lyman W. Bliss; Ulster, John V. Holt; Warren, Hiram McNutt; Washington, George W. Little; Wayne, Allen W. Marsh; Westchester, George B. Upham; Wyoming, J. Meacham; Yates, Henry P. Sartwell.

Original Lectures.

LECTURES
ON THE
DIAGNOSIS OF DISEASES OF THE HEART.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE DURING THE PRELIMINARY TERM.
SESSION 1862-63.

By AUSTIN FLINT, M.D.
PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE III.

Of the Mechanism of the Production of the Second Sound of the Heart.—Of the Valvular Element and the Element of Impulsion composing the First Sound of the Heart.—The Proof of the Existence of these two Elements afforded by Auscultation of the Healthy Chest.—Representation of the Characters of the Two Sounds of the Heart by Whispered Words.—The different Blood-Currents, Normal and Abnormal, through the Mitral and Aortic Orifices: viz. the Mitral Direct, the Mitral Regurgitant, the Aortic Direct, and the Aortic Regurgitant.—The Relations of these different Currents to the Heart-Sounds.—General Account of Valvular Lesions.—Endocardial Murmurs.—Murmurs produced by the Blood-Currents become the Signs of Valvular Lesions.—Different Characters of Murmurs, viz. Soft, Rough, Musical.—Four Murmurs corresponding to the Four Blood-Currents, distinguished by the same Names, and having the same Relations to the Sounds of the Heart.

Gentlemen:—As introductory to the consideration of the diagnosis of valvular lesions, I gave an account in my last lecture of the normal sounds of the heart. I described the relative characters of the first and second sound as heard on auscultation over the apex of the heart, and the rhythmical succession of the two sounds. Let me now briefly state the mechanism by which the sounds are produced. The second sound, as all are now agreed, is due to the sudden expansion of the segments forming the aortic and pulmonic valves; the force causing the expansion of these segments is derived from the recoil of the arterial coats, occurring after the arteries have been distended by the blood propelled into them by the systolic contraction of the ventricles. Owing to the elasticity of their coats, the arteries recoil upon the blood which they contain immediately the propelling force of the ventricles ceases, and this recoil would drive a portion of the blood back into the ventricles, were it not that the movement of the blood in a retrograde direction expands, with quickness and force, the valvular segments which close the arterial orifices, and regurgitation is thus prevented. This mechanism is important to be recollected with reference to an understanding of the physical signs of disease. The sudden forcible expansion of the valvular segments, as just described, gives rise to the second sound of the heart. The first sound is less simple. It is a compound sound, and all are not agreed concerning the mechanism of its production. Without entering into a discussion of the matter, I shall give you my opinion, viz. that this sound is composed of two elements: one element being a sound produced by sudden and strong tension of the auriculo-ventricular valves (mitral and tricuspid) when the ventricles contract, and the other element being a sound produced by the movements of the apex of the heart against the thoracic walls during the ventricular systole. For the convenience of reference I am accustomed to call the first the valvular element, and the second, the element of impulsion. This subdivision of the first sound into these two elements is involved in the understanding of certain of the signs of disease.

Let me dwell upon this point sufficiently to tell you how the fact of the first sound being composed of the two elements just named is susceptible of proof. The characters of the first sound, as compared with those of the second sound, which I described in my last lecture, are the characters belonging to this sound when heard over the apex of the heart. If, after listening to the first sound over the apex, you remove the stethoscope at a certain distance from the heart, you will find that most of the distinctive characters of this sound are lost: it is no longer louder and longer than the second sound, and the booming quality has disappeared. It is now short and valvular like the second sound, being less intense and still lower in pitch. What has occasioned this difference? The element of impulsion is eliminated, and the valvular element only remains. This is the explanation. The element of impulsion is propagated but little beyond the heart; the valvular element is propagated further; consequently, at a certain distance from the border of the heart, we eliminate the element of impulsion, and have only the valvular element. It is the element of impulsion which gives to the first sound, over the apex, its intensity, its length, and its booming quality. The valvular element of the first sound is less intense than the second sound, has the same valvular quality, is as short, and is lower in pitch. These points you can easily verify for yourselves, and I hope you will do so. Another mode in which you may eliminate the element of impulsion from the first sound, is to place between the pectoral extremity of the stethoscope and the chest several thicknesses of soft cloth. By this means you prevent the transmission of the element of impulsion, but not of the valvular element. This experiment you can easily make.

The correctness of this explanation of the mechanism of the first sound of the heart is confirmed by the effects of disease upon this sound. These effects constitute physical signs of disease to which I shall hereafter refer. With regard to the movements of the heart giving rise to the element of impulsion, let me say that they consist of the locomotion of the apex from left to right, the rotation of the organ in the same direction, and the elongation of the organ—all occurring during the ventricular systole. When I mention the elongation of the heart during the systole, I should add that this is at variance with some physiological writers, who state that the organ diminishes in length; but that the heart really elongates will be demonstrated to you tomorrow by the Professor of Physiology, who will show this, together with other points connected with the movements of the organ, by exposing it to view while in action in an animal poisoned by woorara.

Reverting to the rhythm and distinctive characters of the heart-sounds, these may be represented by certain words pronounced in a whisper. Bouillaud, who first proposed this plan, employed the words *tic-tac*. These words, however, do not represent the differences of pitch, quality, and length, between the two sounds, so well as other words which have been suggested. The words *lub-dup*, proposed by Dr. Williams, or *too-to*, proposed by Dr. Hughes, answer very well. The words used by Bouillaud answer equally well if they are simply reversed, viz. *tac-tic*; pronouncing these words in a whisper you have the relative characters of the first and second sounds very well represented. Representing the two sounds as heard at the apex, the stress of the voice should fall on the *tac*; the first sound in this situation, being the louder, is said to be accentuated. But to represent the relative intensity of the two sounds at the base of the heart, the stress should fall on the *tic*; the second sound in this situation being the accentuated sound.

As a further preliminary to the consideration of the diagnosis of valvular lesions, the different blood-currents through the orifices of the heart in health and disease, and their relations, severally, to the heart-sounds, must be clearly understood and familiar. I have already said that valvular lesions in the great majority of cases are limited to the left side of the heart. In considering the blood-currents, we will direct our attention to the left ventricle and auricle;

but the existence of corresponding currents on the right side of the heart will be sufficiently intelligible. There are two currents pertaining to health on the left side, viz. the *mitral direct* and the *aortic direct current*. We call these *direct* currents because the flow of blood through the orifices named is in its direct, normal course. The *mitral direct current* is from the left auricle into the left ventricle through the auriculo-ventricular or mitral orifice. Now, when does this current take place as regards the heart-sounds? It takes place when the auricle contracts, and the auricle contracts just before the contraction of the ventricle. The ventricular and the auricular contractions follow in quick succession, so that the two contractions succeed each other with scarcely an appreciable interval between them. This will be demonstrated in the physiological lecture to-morrow, when the heart in action will be exhibited to you. The first sound of the heart is due to the contraction of the ventricles; hence, the mitral direct current of blood must take place just before the first sound; it is pre-systolic, and there is no interval between its occurrence and the first sound.

The *aortic direct current* is from the left ventricle into the aorta. When does this current take place as regards the heart-sounds? It takes place when the ventricle contracts. And, since it is the contraction of the ventricles which causes the first sound of the heart, the current must take place with the first sound.

So much for the two direct currents. Corresponding currents on the right side of the heart should be called the *Tricuspid direct* and the *Pulmonic direct current*. The two remaining currents on the left side are abnormal, and they are distinguished as *regurgitant* currents. These currents only exist when certain valvular lesions are present; and this fact leads me to give a general account of lesions affecting the valves and orifices of the heart.

Valvular lesions are varied in their character. I cannot consider them fully in this connexion. They are due to atrophy of the valves, rupture, atheromatous and calcareous degeneration, warty growths, etc. On the table before me are several specimens. Suffice it to say, that the varied lesions may produce, *First*, contraction of the mitral or aortic orifice. Lesions producing this effect are called obstructive lesions; they obstruct the direct blood-currents. *Second*, they may impair the aortic valvular segments or the mitral valvular curtains, and render them to a greater or less extent inadequate to protect the orifices. The valves are then said to be insufficient or incompetent, and the orifices are said to be patescent. Consequently, regurgitation ensues, and then we have regurgitant blood-currents. If the mitral valvular curtains are damaged, we have the *mitral regurgitant current*. This abnormal current is from the ventricle to the auricle. When does it take place as regards the heart-sounds? The current is produced by the contraction of the ventricle; and, since the contraction of the ventricle causes the first sound of the heart, this current, of course, is with that sound.

If, on the other hand, the aortic valvular segments are rendered incompetent, we have the *aortic regurgitant current*. This current is from the aorta into the left ventricle. When does it take place as regards the heart-sounds? The current is due to the recoil of the arterial coats; and as we have seen that it is this recoil which causes the second sound of the heart, this current is with that sound.

Third, Valvular lesions may exist without involving either obstruction or regurgitation; they may simply present a roughened surface to the blood-currents in their direct course. We shall see hereafter that under these circumstances they give rise to physical signs. It may seem to you, gentlemen, that I am needlessly minute and tedious in these preliminaries to the consideration of the diagnosis of valvular lesions. But I assure you I am not so. Without a clear apprehension of, and familiarity with the blood-currents just named, and their relations to the heart-sounds, the signs on which the diagnosis of valvular lesions is based, cannot be made intelligible; and with this preparatory acquaintance with the blood-currents, the diagnostic signs of valvular lesions are at once easily understood. Let me, therefore, recapitulate the four currents; and I would urge you to repeat them sufficiently to render them perfectly familiar. Arranging them now into two classes, viz. the mitral and aortic, we have *First*, the mitral direct and the mitral regurgitant current; *Second*, the aortic direct and the aortic regurgitant current. The mitral direct current, produced by the contraction of the auricle, is pre-systolic, that is, it occurs just before the first sound of the heart. The mitral regurgitant current, produced by the contraction of the ventricle, occurs with the first sound of the heart. The aortic direct current, produced by the contraction of the ventricle, occurs with the first sound of the heart. The aortic regurgitant current, produced by the recoil of the arterial coats, occurs with the second sound of the heart. Adopting another classification, we may arrange the different currents into, *first*, those occurring with the first sound of the heart, and *second*, those occurring with the second or before the first sound; the former we may call the *systolic*, and the latter the *diastolic* currents. The systolic are the mitral regurgitant and the aortic direct current. The diastolic are the mitral direct and aortic regurgitant current.

I come now to consider signs of disease incidental to the blood-currents just considered. In health, as we have seen, we have only the direct currents, and these, owing to the smooth and polished membrane which lines the valves and orifices of the heart, occasion no sound. We have only, in health, the two heart-sounds which have been considered. If, however, the orifices through which the currents flow be contracted by obstructive lesions; if the valves are rendered incompetent by lesions so that regurgitant currents take place, or even if the endocardial membrane be roughened by calcareous deposits, vegetations, etc., adventitious or abnormal sounds are produced. These abnormal or adventitious sounds are called *murmurs*. Here is a conventional use of terms which is to be borne in mind. The two sounds of the heart, either preserving their normal characters or modified by disease, are known as the heart-sounds; but all sounds which are originated by disease—adventitious—are distinguished as cardiac murmurs. The *murmurs* produced by the blood-currents within the heart are further distinguished as *endocardial murmurs*, and murmurs without the heart, that is, on the heart's surface, are distinguished as *exocardial*, or, sometimes, *pericardial* murmurs.

The murmurs produced by the blood-currents, or the endocardial murmurs, differ as regards intensity, pitch, and quality. They may be more or less intense, varying from such a degree of fulness that they are with difficulty appreciated, to such a degree of loudness that they may be heard at a distance from the chest. They may be high or low in pitch. In quality they are said to be soft, rough, and musical. Generally they are soft, and resemble the sound produced by the air coming from a pair of bellows; and then, they are said to be bellows or blowing murmurs. Sometimes the quality of sound is expressed by such terms as rasping, filing, grating, croaking, and then the murmurs are said to be rough. In some rare instances (I happen to have an example now in my hospital wards) they have a musical intonation. I may remark here that the intensity, pitch, and quality of the murmurs have not, in general, much pathological or diagnostic significance. Their value in the discrimination of valvular lesions depends chiefly on other points, and the first point is always to determine by which of the four blood-currents is a particular murmur produced.

Continuing to limit our attention to the left side of the heart, each of the four blood-currents which we have considered, may give rise to a murmur, either soft, or rough, or musical. There are, therefore, four cardiac murmurs; two produced at the mitral and two at the aortic orifice. These murmurs are distinguished by the same names as the blood-currents. We have a mitral direct and a mitral re-

gurgitant, an aortic direct and an aortic regurgitant murmur. These murmurs denote the existence and the situation of valvular lesions. Whenever we find an endocardial murmur we desire, in the first place, to determine which one of these four murmurs it is. How do we determine this? By ascertaining, in the first place, its relation to the heart-sounds. The relations of the several murmurs to the two sounds of the heart are, of course, the same as the relations of the blood-currents. Consequently, a mitral direct murmur will immediately precede the first sound, and the mitral regurgitant murmur will accompany and follow that sound; the aortic direct murmur will also accompany and follow the first sound, and the aortic regurgitant murmur will accompany and follow the second sound of the heart.

It remains to point out additional means of discriminating these four murmurs; to explain the mode of determining when two or more of them are present, as is not unfrequently the case, and to consider their diagnostic significance and value. These points I must reserve for my next lecture.

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from* p. 187.)

We now turn to the fatty degeneration as it is called This term embraces the deposit of oil globules in three different parts of the kidney structures; within the cells of the epithelial lining; within the tubes when the epithelium has been more or less removed; and in the midst of the fibrous matrix or intertubular structure. The deposit is more frequently seen in the epithelial cells than in the empty tubes; but in all these forms it is an accident of Bright's disease frequently met with. Mark, an *accident.* And I wish to say again to those who are accustomed to speak of *fatty kidney* as one of the forms of that affection, that though fatty deposit may be a marked feature of this or that specimen, it does not characterize any variety of the disease to the exclusion of other lesions, and has no claim to be the basis of a classification. At least in these thirty cases, though it occurred very often, and in its various forms, there was not a case in which it was not attended by other grave changes; and in a much larger range of cases, I cannot remember an instance in which it occurred alone. Its presence or absence cannot be known during life by any symptom, or inferred from the habits or condition of the patient with any degree of certainty, except from the fact of finding or not finding fatty cells or fatty casts in the urine. It is true, that among the lesions of the large white kidney, oil globules in greater or less quantity are almost always to be found, and that we may often recognise this kidney before death. So far we can go. But this is in no proper sense *the* fatty kidney.

The infiltratiou of oil into the cells of the epithelium varies in degree from a globule or two, to the greatest capacity and distension of the cell. The globules are usually small and often numerous, as seen on cards No. 7, 9, and 14, though sometimes they are of such size that one to six of them will not only fill but greatly distend a cell, as on No. 17. Sometimes a few only of the cells in the different tubes contain the oil, the others presenting a healthy appearance; and again, the deposit will be found more or less abundant in one-half, or two-thirds, or indeed in almost all the cells throughout the organ. When the fatty deposit in the cells is at all considerable, the attachment of these cells to the basement membraue is easily broken up, and slight manipulations empty the tubes, while the fatty cells are seen floating in the menstruum by which the piece is surrounded. The oil-laden epithelium is not only discharged in this way after death, but there is reason to suppose that it is easily cast off during life, for we occasionally find great numbers of these fatty cells in the urine; and in our microscopic examinations we sometimes find tubes entirely destitute of epithelium of any kind, and filled with oil globules, large and small. This oily exudation must have occurred before death, and the epithelium must have been cast off before it could have occurred. Examples of these oil-filled tubes are seen on the large sheets, on a card No. 16, and on that marked "Beaumont's kidney." In none of these instances was there any considerable amount of oil in the intertubular spaces to favor the idea of post-mortem infiltration. It is to be remarked, that in these tubes there appears to be no more power to reproduce the epithelium than in those that have been denuded by granular degeneration. It is barely possible that the oil within the otherwise empty tubes may come from the bursting of fat-laden cells; but there is no evidence of it in the discovery of here and there a less heavily laden cell, or of the debris or fragments of cells. Besides this, there is no reason for supposing that the fatty cells are destroyed as the granular cells are; but it would seem that when they are filled to a certain degree, they fall off and are carried away with the cell-walls unbroken. Thus we have the deposit of oil globules in the cells, and in the uriniferous tubes when deprived of epithelium.

We often see it also infiltrated into the fibrous matrix. Granular matter such as is seen within the tubes is not found here. There is a very fine nebular deposit often in the midst of the fibres and on the malpighian bodies, the nature of which I have not investigated. Occasionally, the fibres themselves appear granular, as if granules produced from the plasma could not be marshalled into their places to form compact tissue, or as if protein granules were produced in needless profusion, and could undergo no further transformation. These granules are larger than those which result from the breaking up of the epithelial cells, having more resemblance to fat globules, with which they are often mingled. The fibrous matrix itself sometimes breaks down, leaving a granular debris mingled with oil globules. It is claimed that this change is a conversion of a protein or fibrous tissue into oil or fat. This may be so, but it seems to me more in accordance with known facts to suppose that while the fibrous material is undergoing disintegration and removal, there is a deposit of oily matter, in the same manner as when the liver, or the cells or tubes of the kidney, become fatty. This oil is probably a contribution from the dissolved fat of the circulating blood. The intertubular fat is usually deposited in small globules, though sometimes the globules attain considerable size. It is sometimes seen in thousands of shining grains on the outside of the uriniferous tubes, and not in the fibrous matrix proper, though far more commonly it is diffused pretty regularly through the latter. The illustration of this outside tubular deposit may be seen on card No. 8, and the more general diffusion of it on No. 12. This intertubular oil is sometimes deposited in circumscribed spots, and not distributed evenly through the matrix. When this is the case there are usually evidences of disorganization, such as the absence of tubes, and a granular condition of the fibrous tissue, at these particular spots. Such a spot has a grey or white opaque appearance, and when the spots are numerous, we get one of the varieties of grey mottled or spotted kidney. It will soon appear that this excess of oil globules, in one or other, or in all the forms here described, is one of the causes of the white, yellowish, or grey color which the large kidney is so apt to assume. The granular degeneration just described is another of the causes of this change of color.

The fatty and granular changes often concur in the same kidney, as I have already stated, and when combined each contributes to the same result. I exhibit here some illustrations of this concurrence. Cards Nos. 10, 11, and 15, show cells which are undergoing the granular disintegra-

tion, and contain at the same time many small oil globules. No. 9 exhibits groups of cells in different stages of the granular degeneration, and among them only here and there a small globule, also a group of cells from another part of the same kidney, that are heavily loaded with oil; —while Beaumont's kidney and No. 16 show us tubes deprived of epithelium, and loaded with granules and oil globules mingled in varying proportions. Either of these two lesions may occur separately, or they may co-exist in the same organ, both of them varying in degree almost infinitely.

The malpighian bodies, in the large proportion of cases, are found to have undergone little or no change. In rare instances, they will be very conspicuous in the microscopic field, on account of the bright blood color which they retain. One aspect of this condition has been already spoken of. If kidneys could be seen during life, this red color would doubtless be found to be normal; but when, after death, after the large vessels have been cut in removing the organ from the body, and the smaller ones in getting a portion for microscopic examination, the blood still fills the malpighian tufts, it is received as evidence of ante-mortem congestion, and a congestion affecting these bodies disproportionately, perhaps. I do not know that this state has any other significance. When seen, it does not characterize any particular stage of disease, though most frequently met with in the earlier periods, and rarely if ever in the contracted kidney. In such cases, the urine of the last twenty-four hours, or last days of life, is frequently scanty, high colored, and contains blood. The last marked case which I have met with was in a young man who had had paraplegia for two years, and Bright's disease for several months. The kidneys weighed between six and seven ounces each, and contained an excess of fibres and some cysts.

The malpighian bodies are also subject to important alterations in the fibrous or contracted kidney. The capsule or investing membrane, usually thin, delicate, and hyaline, often becomes thickened and fibrous, and greatly contracted. When this happens, the fibres which have been added are usually distinctly visible by the microscope, giving to the membrane an aspect very different from that which it has when natural. The body is by this means contracted, sometimes even to a quarter of its proper dimensions. With this contraction there is a dwarfing of the inclosed tufts, and not unfrequently a complete absorption of them; and it is noticeable often that the tufts are shrunken in a greater degree than the capsule is contracted, so as to leave an unoccupied space within the diminished capsular cavity. Thus, many of these important bodies are, in some instances partially, in others wholly destroyed; and this it appears to me is effected by the contraction of new, or at least abnormal fibrous tissue, in this instance deposited on a tissue in which naturally fibres cannot be seen. In some kidneys a very considerable proportion of these bodies have undergone these changes, but never all of them.

In the same variety of this disease, the uriniferous tubes are often found to be seriously implicated. Their size is seen to be diminished through large portions of the kidney. In certain limited portions they are occasionally entirely destroyed. When the tubes have disappeared, their places seem to be taken by granular fibres, the pseudo-fibrous debris of the tubes, rather coarse granules and oil globules. These changes seem to be most easily explained by supposing them to be the effect of pressure produced by the contraction of an unnatural amount of fibrous tissue.

Serous cysts, often of a size to be appreciated by the eye alone, often microscopic, are very common in the contracted kidney. Numbers of them may be seen in the drawings of the small and medium-sized kidneys, now in the hands of the Fellows. Those that are visible to the naked eye, vary in these specimens from the size of a pin's head to that of a bean. They are distributed everywhere through the secreting portion of the organ, but those that principally attract attention, though formed in the cortical layer, have pushed out and become prominent on the surface. They consist of a semi-transparent capsule or cell, and nearly transparent watery contents. The size to which they can attain, or the number which can be formed in any particular organ, is almost indefinite, but those here represented are not very large or very numerous. They may occur in kidneys not known to be fibrous, or in any other manner diseased than that they are invaded by these cysts. The origin of these bodies has been the subject of much speculation, and of some research. It is claimed that they are produced by a serous infiltration into the inverted portions of the uriniferous tubes which are supposed to be reflected over the malpighian bodies to form their capsules. It would be near the truth, therefore, in this view, to call a serous cyst, a dropsy of one of the malpighian bodies. Another theory is, that they are formed by the extraordinary development of some of the natural cells of the organ; and as all the natural cells are within the tubes, except the fibre-cells, which have never been thought susceptible of this transformation, this hypothesis implies that the cyst is at first intratubular. But the opinion which has the endorsement of Dr. George Johnson, is the only one which I need stop to consider. In his view these cysts are formed out of the uriniferous tubes after the epithelium has been cast off. He gives a figure (p. 218) of such a tube undergoing the change into cysts, "much dilated, and bulging in the intervals of the fibrous rings, by which it has, in parts, been constricted." The idea seems to be that the fibrous matrix, or portions of it, contract irregularly around the tube and cut it into sections, and that in each of these sections the tube becomes closed so as to form a cell or cyst, thus making a series of cysts, which gradually enlarge till they are of a size to be examined by the naked eye. "A careful examination," he says, "will always detect in immediate contact with the cyst-like appearances, unequivocal portions of the elongated tube having the same structure and contents as the other parts, and evidently identical and continuous with them, the continuity only being concealed by the fibrous tissue in which they are packed." It is now many years since I explained my own views of the origin of these cysts to the Pathological Society. Before I was acquainted with the opinion of Rokitansky or Prof. Paget, and I believe before their observations were published, I had become convinced that they begin in independent germs, that they are recognisable as cells while they are yet small, smaller than the uriniferous tubes, and that they can be seen of increasing size, of every possible diameter, up to those that are large enough to be appreciated by the naked eye. They are wholly intertubular, and nothing that I have ever seen would allow me to admit Mr. Simon's theory that they are originally epithelial cells which have escaped into the matrix by the bursting of the tubes. They appear to my eye to have the same origin that cysts have, around and behind an indurated or a cancerous breast; in the neck, when not connected with the thyroid gland; in the bones, and in the muscles. I call attention particularly to the cysts which occur among the fibres of muscles, and also to those which are found in the adventitious fibrous layer which is formed in chronic dysentery under the peritoneal covering of the large intestines, as they resemble very strikingly the serous cysts of the kidney. A drawing that I here exhibit will give an idea of their appearance among the multiplied fibres of the intestine. But for the absence of tubes in the tissue, they might be mistaken for kidney cysts. They are, however, more markedly oval, and their contents are more granular than would usually be found in that organ. Cysts of this kind, as well as those which occur in fibrous and other tumors, can hardly be accounted for on the supposition that they are transformations of any of the native elements of these parts. They are, in all probability, a new and independent formation. They are, in the words of Prof. Paget, "primary or autogenous cysts." Such, it is my conviction, are the serous cysts of the kidneys. But I

must admit that reasoning and analogies are little to the purpose, except to show what is possible. After that, the question must be settled by observation and testimony. Dr. Johnson thinks he has seen the tubes breaking up into cysts, and believes he has seen the tubes "identical and continuous with them" (the cysts), with this modification, however, "the continuity only being *concealed* by the fibrous tissue in which they are packed." When I examine Dr. Johnson's figure, I think I have seen the appearance which he represents, and have convinced myself that the "bulgings" were independent cysts, and "the fibrous rings by which it (the tube) has been, in parts, constricted," are a part of the augmented intertubular matrix, separating primary and originally isolated growths. The prolongations, by his own statement not very obvious, I have never seen, or if I have seen them, they have been to my eye adjoining cysts, elongated somewhat as these kidney cysts often are; or a uriniferous tube which has been bent by the growth of a cyst and has resumed its course above or below in the line of the latter. I cannot say that I have distrusted my own observations on this point, for it has seemed to me, these many years, that I could demonstrate the facts, as I have seen them, to any person who had even a moderate familiarity with the microscope; but I was gratified to learn from Dr. Elliot that the late Dr. Isaacs, a year or more before his death, satisfied himself of the independent and primary origin of these cysts. In passing, it may be worthy of remark, that while Dr. Johnson is persuaded that new fibrous tissue has no important share in producing any of the characteristic features of chronic nephritis, he still finds that the uriniferous tubes are constricted by portions of the fibrous matrix. This would hardly occur, if this matrix were normal in quantity and healthy in quality. But this is aside from our present purpose. It is more apposite to inquire by what autoplasty the severed portions of the denuded tube are to unite to form a cyst. It is far from inconceivable that they may do so, but it would add to the strength of the theory, if, independent of the theory, they were shown to possess such a power. In dismissing this point, I will repeat that to my eye the cyst is a cell from the first; and add that these bodies, while they occur in many parts of the system, have a preference for new formed fibrous tissue, hence their occurrence in and about the indurated breast, in the fibrous hypertrophy of the intestines, in fibrous tumors, and, as I believe, in the adventitious fibrous tissue of kidneys affected with Bright's disease, yet nowhere showing any marks of being formed out of such tissues; that their occurrence in the neck, and the remarkable number that is sometimes seen in the kidneys, when these organs are not known to be affected with any form of Bright's disease, or any other disease but "cystic degeneration," renders it probable that no hypertrophy of the fibrous tissue is necessary for their production; and that the occurrence of uncomplicated cystic degeneration will, in the view taken by most pathologists, of the different behavior of old and new fibrous tissue, be fatal to Dr. Johnson's theory, if the cysts of this degeneration are admitted to be the same as those of the fibrous kidney.

There is still a question which the microscope ought to solve, but which to my mind is only partly answered. What causes the great enlargement of the kidney in Bright's disease? The granular degeneration of the cells does not materially enlarge the tubes, and consequently cannot greatly expand the kidney. The cells that become loaded with oil diminish the calibre of the tubes oftener than they dilate them, yet such tubes are often dilated. The oily deposit in the denuded tubes, though the latter are often large, affects only a limited portion of any kidney. Here then we seek in vain for the adequate causes of an augmentation which sometimes reaches four times the size and weight of the healthy organ. The intertubular deposits have been described as fibres, serous cysts, granules, and oil globules. The first two have, as a rule, no part in producing the enlargement. The fibrous formations contract the organ. It is only when the plasma is taking form or the fibres are incompletely consolidated, that the bulk of the material would add much to the general mass, and in this condition they are rarely, if ever, seen in the affection we are considering. The cysts are things apart, and as has been said, belong mostly to the fibrous kidney, though they are sometimes found in those that are larger than natural. It is to the granular matter and to the oil, among the visible deposits, that we are to look for the enlarged dimensions. That there is an infiltration of some sort into the structures is obvious. The cortical layer is often unnaturally thick, the pyramids are separated from each other by unusual spaces, and their external borders are made feathery by the exudation of new material between their elements. In kidneys which have become very large, I have sought in vain for such a quantity of either or both these substances as would fully account for the enlargement. Dr. Goodfellow attaches much importance in this connexion to a watery or œdematous state of the kidney, and thinks that the renal œdema precedes the general anasarca. "The serosity," he says, "drops from it (the large kidney) in large quantity as you make a section of it." (p. 60.) Watery kidneys, it is true, are not very uncommon, but I can assert positively that some of the largest I have seen have been firm and resisting to the finger, and have not been loaded with serum. I may add Dr. Goodfellow (p. 201) finds that "the tubes are empty and compressed in places, but in general are greatly distended with altered epithelium, mixed with granular matter more or less fine." These distended tubes would help to explain the augmented size of the kidney if they exist, but as I have already stated, in my examinations, for the most part, the distended condition has not been found in such degree as to be very important in this respect. Thus then the matter stands. I do not think we have yet a full explanation by the microscope of extraordinary enlargements of the kidney.

I will now offer a statistical report of the condition in which the kidneys were found in these thirty cases, on microscopical examination. We have already seen that there are symptomatic distinctions between the large and small kidney that are, at least in the extreme cases, pretty easily made out. We shall learn from this report that the lesions have no such distinct and separate characters, but that what happens to the large kidney happens also to the small, and that the organ becomes large or small through the agency of deposits that are common to both; the large or small size being the result of quantity and proportions, and also of the circumstances attending the exudations.

It will be remembered that among these thirty cases the kidneys were contracted in four; of nearly normal size in nine; and large, often white, in sixteen. We might expect an excess of the fibrous matrix in the four that were contracted, and not look for it in any of the others. It occurred, indeed, in these four, but it also was found in eleven that were not contracted thus:—

Fibrous matrix noticed in	29
Fibres, in unusual abundance, firm or granular, in .	15
" little or not at all increased, in	14

The weight of the kidneys in which the fibres were in excess was as follows, in ounces:—2¾, 3, 4, 4½, 5, 5¾, 7, 7, 7½, 8½, 9, 9½, 9¾, and 12, embracing the smallest and the largest, and running through nearly all the intermediate sizes. The greatest excess was noticeable in those that were contracted. The weight of those in which the fibrous matrix was but little or not at all increased was as follows:—4, 4½, 4½, 4½, 5, 5½, 6, 6, 7, 7½, 8, 9½, 9½ oz. The average weight of the kidneys containing an excess of fibres was 6¾ ounces; of those not having excess, or doubtful, 5¾ ozs. But the kidneys weighing 9½ oz. had an abundance of fibres, and it was doubtful whether they ought not to have been transformed to the other class. Thus it appears that while this excess is the characteristic feature of the contracted kidney, it is seen in every gradation of size.

The granular degeneration of the epithelial cells was more frequently met with than fatty deposit in the cells, and

when they concurred in the same kidney, the granular degeneration was commonly the most marked.

Granular degeneration of the cells occurred in 24.
" " " did not occur in 6.

(To be Continued.)

CASE OF IMPENDING DEATH.

TREATMENT AND RECOVERY BY TINCTURE OF CANTHARIDES IN LARGE DOSES.

By JOSIAH A. B. MUSE, M.D.,

ATTENDING PHYSICIAN AND SURGEON TO THE U. S. GENERAL (MARINE) HOSPITAL, NEW ORLEANS, LA.

Benjamin Washer, æt. 30 years, came under my care, at this hospital, laboring under pulmonary tuberculosis. On Sunday, Sept. 7th, he became wildly delirious. Taking it, in view of circumstances, to be a case of tubercular meningitis, I treated it as such, and sedative treatment (qualified by supporting measures) was pursued, but without the least benefit, until symptoms of "prostration with excitement" became so unmistakably evident that all direct sedatives were abandoned, and a plan of treatment, from which they were scrupulously excluded was adopted. On the evening of Tuesday, Sept. 9th, however, he began to sink; he had not slept for three nights; no nourishment, since the first day, could be retained for a moment on the stomach. He continued steadily sinking until the time of my visit on Thursday morning, Sept. 11th, when I found him moribund. *Animal* life might almost be said to be extinct. The radial pulse was still perceptible, and diaphragmatic respiration was yet performed. The reflex action of deglutition could be excited only with the greatest difficulty, and the sphincters were all relaxed.

Prof. R. K. Browne, of New York, Surgeon-in-chief at this Hospital, had intimated to me, a short time ago, that he desired me to administer tincture of cantharides in the first desperate case of impending "death by asthenia" which should present itself in any of my wards. Although I did not consider this as a fair case for an experiment, inasmuch as I hardly expected the patient to live longer, I, however, drew his attention to the facts. At his suggestion I commenced the "heroic" use of tincture of cantharides, in doses of forty minims, frequently though irregularly repeated, according to the effect produced. The result was wonderful. In an incredibly short space of time (in the order of time in which I have enumerated them), warmth returned to the skin; the sphincter muscles regained their normal degree of tonicity; the "Hippocratic countenance" entirely disappeared; respiration was once more fully and equably performed; and every bad symptom vanished as it were by magic. Within three or four hours I had administered between two and three fluid drachms of the tincture. The patient enjoyed a refreshing sleep during the ensuing night. On the following morning he was in the calm possession of his mental faculties; took and retained amply sufficient nutriment, and was fairly on the high road to recovery. The tincture was given in diminished doses, and at length withheld, and the patient, on the Sunday following (Sept. 14th), had entirely regained his previous condition of health; his recovery having been more rapid than his decline, and without the least symptom of strangury having once made its appearance. It is the opinion of Dr. Browne that strangury will never occur in these extreme cases of debility, and that life may sometimes be saved at the last by this heroic remedy. In other cases he recommends it in combination, in smaller quantities, with other remedies, when a pure and powerful stimulant is needed.

Professor Hyrtl and Professor Hebra have received Exhibition medals; the first for his anatomical preparations, the last for a water-bed.—*Dub. Jour.*

Reports of Hospitals.

BELLEVUE HOSPITAL.

MITRAL DIRECT MURMUR, ILLUSTRATED BY CASES.

SERVICE OF DR. AUSTIN FLINT.

Auscultation has shown us that in organic disease of the heart the existence of four distinct murmurs can be clearly pointed out; these are the mitral direct and regurgitant, and the aortic direct and regurgitant. Concerning the three latter very little difference of opinion exists as to their frequent occurrence, but of the first named very many have denied its existence altogether. The following cases in which this murmur was known to have existed afford a sufficient opportunity for studying some of its characters.

The murmur is produced by the current of blood which is propelled over the mitral valve into the ventricle by the contraction of the auricle. As the contraction of the auricle immediately precedes that of the ventricle, it follows that the sound produced by that current must be pre-systolic, that it must be arrested immediately when the first sound takes place. The sound is generally harsh and of a blubbering and fluttering character, heard immediately before the first sound of the heart with no interval between. The condition which usually gives rise to it is that known as the "button-hole slit," where the margins of the valves are adherent to each other. But there is no just reason to suppose that organic diseases always coexists with the sound, inasmuch as it may be produced when the valve is perfectly healthy. As proof of this fact it has been known to have been produced by aortic regurgitation, and Dr. Flint is disposed to explain its occurrence in the following ingenious manner. There being considerable insufficiency of the aortic valves, the ventricle is so filled with blood that the mitral curtains are floated up and the edges of the valves brought in contact, and while in this situation the auricle, contracting, throws the blood through the curtains, producing the peculiar blubbering sound. The murmur may again be produced, though very rarely, by the flow of blood over a roughened surface. The murmur is heard most distinctly at or a little within the apex beat, and its connexion with the first sound may be easily made out by placing the finger upon the carotid. The pulsations of this artery being, so to speak, synchronous with the first sound, the murmur will be found immediately to precede it. This serves, in a measure, to distinguish it from the diastolic murmur; but there will be found another important distinction to exist, being a well marked interval between the end of the second sound and the commencement of the murmur. This murmur may, as will be seen by a reference to the following cases, coexist with others—as for instance the mitral regurgitant. In that case the distinction between the two is for the most part very certain and satisfactory, the one being usually harsh and pre-systolic, the other following the first sound and very often being soft.

I.—*Mitral Direct Murmur and Enlargement of the Heart.*—Johannah D., æt. 24, was admitted Nov. 10, 1861. She stated that she had had two attacks of acute articular rheumatism, the first two years before, and the latter about nine months before admission. She had had cough and expectoration for three years, and repeatedly bloody expectoration for six or seven months. She had suffered from palpitation of the heart on exercise. On one occasion her appetite was poor, bowels regular, menstruation profuse, pulse eighty-six and small, respiration twenty-four and not labored; was subject to attacks of hysterical convulsions.

Physical Signs.—The apex beat was in its sixth intercostal space; impulse, also, in fifth intercostal space. The area of the superficial cardiac region was proportionably increased. A loud and rough pre-systolic murmur was heard, with its maximum of intensity at the apex, and extending a little to the outside of it. Over the body of the

heart it was distinct, but comparatively feeble. It could be heard over the whole surface of the left side, but became distant, less rough, as well as less loud, after a short distance without the apex. It was very loud within the apex. The murmur could be distinguished but indistinctly at the lower angle of the scapula, and on the left side, and in the left interscapular space.

The pulmonic second sound was somewhat louder than the aortic, which did not appear to be much if at all weakened. No murmur was found save the mitral direct. There was no turgidity of the cervical veins nor pulsation. No œdema anywhere; no distinct sign of tubercle. A tonic course of treatment was pursued, and the patient passed from under observation on the 30th of March.

II.—*Mitral Direct Murmur.—Aortic Regurgitant Murmur.—Enlargement of Heart.—Angina Pectoris.*—Anna S., aged 32, domestic, Ireland, was admitted during the month of May, 1861. She had an attack of acute rheumatism six years ago, and suffered from it for eleven months. Had no similar attack before or since. Dyspnœa first showed itself a year before admission, accompanied with pain in the præcordia, and palpitation, all of which was increased on exercise. On admission she stated that she was subject to paroxysms of severe pain in the præcordia, lastiug from five to ten minutes, and extending to the left arm as far down as the elbow, accompanied by a cramping sensation in the left hand. During these paroxysms great palpitation occurred, and she experienced a sensation as if death were impending. These attacks occurred two or three times every alternate day, and seemed not to be produced by any exciting cause. She was able to be up and assist the nurse in her duties about the ward without much inconvenience. Her aspect was healthy, her appetite good, and menstruation regular. The pulse was 72, rather weak but not jerking, and the respiration was 20 per minute.

Physical Signs.—The apex-beat in the sixth intercostal space on a line with the nipple, the impulse being felt in the fifth, fourth, and third. There was no heaving of the præcordia, but a sharp shock was communicated to the hand. An aortic regurgitant murmur was heard loudest to the left of the median line, a little below the level of the nipple. There was also a feeble rather indistinct aortic direct murmur at the base on the left side, but not on the right. This murmur was not recognisable in the carotid. A mitral direct murmur (rough) was heard a little within the point of the apex-beat. No mitral regurgitant murmur existed. There was no murmur in the carotid anterior to the sterno-cleido mastoid, but a loud one below and posterior to this muscle on both sides. The first sound over the apex was notably loud, long, and booming, and was propagated loudly into the carotids. The pulsations of the carotids were visible, but not markedly so. No turgidity of the cervical veins. The patient's condition remained for the most part unchanged up to the 30th of March, when she passed from under observation.

III.—*Mitral Direct, Aortic Direct, and Aortic Regurgitant Murmurs.—Paralysis of the Left Upper and Lower Extremities (Embolus?)—Epileptic Convulsions.—Danger of Death from Chloroform.*—Mary Austin, aged 24, was admitted in August, 1860. She was the mother of one child. She suffered from an attack of acute rheumatism four or five years before admission, and was confined to her bed four months. About a year after she recovered from the rheumatism, she became suddenly paralysed in the left upper and lower extremity. The face was not affected. When admitted to the hospital she recovered from this difficulty so as to use her left arm, but the leg of the corresponding side was still more or less affected.

About eight months after the attack of paralysis she began to have convulsions, which, from the description she gave, were undoubtedly epileptic. She would have a great number of these attacks in rapid succession, and on one of these occasions chloroform was resorted to by Dr. Thomas, and she came so near dying from the anæsthetic, that for a time she seemed to be dead. For two years she had palpitation and dyspnœa on exercise. During her stay in the hospital she was subject to pains in the præcordia, extending to the left shoulder and down to the elbow. Pulse 100, respiration 36. Appetite was good, but bowels were constipated. The treatment consisted in the administration of ethers, laxatives, and occasional dry cupping.

Physical Signs.—The heart was moderately enlarged, the apex beating in the sixth intercostal space without the nipple. There was considerable shock over the præcordia but no heaving. An aortic direct murmur was heard at the base of the heart on the right side—it was feeble, low, and somewhat rough, being propagated into the carotids. A soft, feeble, aortic regurgitant murmur was heard at the left of the sternum over the body of the heart. A very loud, rough, and characteristic mitral direct murmur was heard around the apex. No mitral regurgitant murmur discoverable. The aortic second sound was notably weakened, and the pulmonic sound notably intensified. On the 30th of March, the time the last note was made, the patient's condition was about the same.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, April 16, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION ON PELVIC HÆMATOCELE.

DR. J. BYRNE, of Brooklyn, read a paper on "Pelvic Hæmatocele," of which the following is an abstract.

After briefly alluding to the earlier history of bloody tumors of the female pelvis, the author confines himself principally to a review of the literature of the subject from 1850 down to the present time. Though the escape of blood into the retro-uterine cul-de-sac of the peritoneum has been noticed for a long time by various observers, yet but few well authenticated cases of encysted pelvic hæmatocele are to be found recorded previous to 1850, and "*even yet some of our standard works on the diseases of females deny the subject a single chapter.*"

The principal, if not the only authors in Great Britain, who have written anything on the subject, are Drs. Tilt and West, and Professor Simpson, and in America, Professor Bedford, who has reported a very interesting case in his work on the diseases of females.

To French physicians, therefore, almost entirely, and to Professor Nelaton in particular, are we indebted for our knowledge of the disease; and the discussions and essays which followed his investigations, prove not only how little the malady has been studied, but also how much we have yet to learn of its true pathology. Much diversity of opinion seems to exist regarding the source of the hæmorrhage, and consequently the relative location of the tumor in hæmatocele; some contending that the effusion takes place, for the most part, either from the peritoneal surface of the ovary or the abdominal orifice of the fallopian tube, and therefore into the recto-uterine cul-de-sac of the peritoneum; and others, that the utero-ovarian veins are the seat of the effusion, and that the sub-peritoneal cellular tissue will be found to be more frequently the pathological nisus in such cases.

The author of the paper discusses at some length the various opinions on these important questions, and regards the pathological changes observed in cases of death as of little value in a statistical point of view, because the majority of intra-peritoneal extravasations must necessarily be fatal, and hence he believes that the sub-peritoneal form of hæmatocele is by far the more frequent.

Exception is taken to the opinion of most, if not all, previous writers on this disease regarding its connexion with "*disordered menstruation*," which latter the author seems to consider as one of the consequences of some pre-existing pa-

thological condition in the ovary or neighboring tissues; because, though admitting that hæmorrhage "to a limited extent," from one or more of the Graafian vesicles, may take place, yet sufficient blood to produce even a moderately-sized retro-uterine tumor cannot be extravasated from a healthy ovary, or a tube whose lining membrane is free from structural lesions.*

The "*ovarian irritation*" of Drs. Bennet, West, Churchill, and others, though often the result of uterine inflammation, is, nevertheless, frequently a primary affection, depending on inflammation of the ovary and neighboring tissues.

The causes are divided into *predisposing* and *exciting*, as follows:—(1st.) Inflammation of the uterine appendages, and its consequences. (2d.) Habitual constipation of the bowels, and morbid growths interfering with the free return of venous blood, and thereby producing a varicose condition of the vessels. (3d.) A hæmorrhagic diathesis from a disordered state of the blood. (4th.) Tubular, uterine, or vaginal occlusion, obstructing the normal secretion or giving rise to regurgitation through the Fallopian tubes. The immediate or *exciting causes* may be, (1st) sudden suppression of the menstrual, or a hæmorrhoidal discharge; (2d) tenesmus or violent muscular exertion; (3d) injuries by a fall or otherwise, and (4th) excessive coitus, and mental emotions tending to active congestion of the internal organs of generation.

Still another cause remains to be mentioned, which might with propriety be classed both as predisposing and exciting, namely, extra-uterine pregnancy.

When the hæmorrhage takes place from the under surface of the ovary, or within the folds of the broad ligament, the patient having previously suffered more than usual from pain in one or other iliac region, will complain suddenly of severe cramp in the lower portion of the bowels, accompanied or soon followed by tenesmus, and weight referred to the loins and sacrum; there may be painful and difficult micturition, and if the quantity of blood poured out be great, faintness, and even complete syncope may now take place; the skin assumes a pale or sometimes anæmic hue; the extremities become cold, the countenance anxious, pulse small and frequent, and the abdomen tympanitic, and very sensitive to pressure, particularly over the seat of the rupture. At this stage of the case, a vaginal examination will rarely fail to detect a tolerably firm and irregular tumor, somewhat painful to the touch, and situated directly behind, or to either side of the uterus.

[A full report of what the author considers a case of subperitonæal hæmatocele of "the most exaggerated type" is referred to, but our space will not permit us to do more than allude to it; we can merely refer our readers to the original paper for its minute and instructive details.]

When the flow of blood takes place into the retro-uterine cul-de-sac of peritoneum the symptoms will of course be most alarming. The pain referred to the hypogastrium will be more intense, and the collapse more complete and enduring; the abdomen rapidly becomes tympanitic, and vomiting of brown or dark grumous liquid, now incessant, adds much to the distress of the patient; the pulse, if perceptible, is very small and rapid, and the features assume a hippocratic expression. Voisin, referring to the frequent absence of premonitory signs indicative of the occurrence, says, that "the suddenness of the symptoms has sometimes led to the suspicion of poisoning."

The Diagnosis of hæmatocele is in most instances extremely difficult, as proved by the case of M. Malgaigne, as well as those of other observers. And referring to this part of the subject, Nélaton says, "the first case which I saw, I pronounced encephaloid disease, and incurable;" and of the second he adds, "I reflected a long time, and concluded at last to introduce a trocar: if *cancer*, it could do no harm, and moreover, I had an idea that it might prove to be *abscess*."

* It is hardly necessary to state that the author does not question the fact, that menstrual regurgitation may give rise to *intra-peritonæal* collections.

If, however, a careful inquiry be made into the previous history of the case, it seems hardly possible to make such grave mistakes; because, malignant growths, at least, and hæmatocele, present so few symptoms in common, that unless in a very anomalous case of the latter, which might possibly exhibit some extraordinary features and complications, such an error of judgment would seem to argue great remissness on the part of the professional attendant.

The *principal* diseases with which it might be confounded, are, *pelvic abscess, retroversion of the uterus, dislocated ovarian cysts or fibrous tumors, and extra-uterine fœtation.*

Suppuration will, for the most part, be ushered in by much constitutional disturbance, manifested by fever, rigors, &c. The swelling is more painful to touch, and gradually increases in size, and becomes softer. Whereas, *in hæmatocele the tumor is immediately formed*, and in the course of time may become less sensitive, and in all cases more firm.

Retroversion at first sight might be mistaken for hæmatocele or vice versâ, but the position, or rather direction of the os and cervix, and other features diagnostic of this displacement, render it hardly possible to entertain doubts on this point after mature reflection: should some peculiarities represent, however, tending to excite suspicions one way or other, the introduction of Simpson's sound will be the most unequivocal means of arriving at a correct inference.

Ovarian cysts are less likely to be mistaken for hæmatocele than fibrous tumors, because, though their sudden displacement into the retro-uterine region might give rise to symptoms very analogous, yet in the former, the swelling will be more isolated and to a certain extent easily defined, movable, and situated pretty high up in the vagina: the uterus will also admit of being moved independently of the tumor, especially if the sound be used; and lastly, there will be no sudden anæmia.

Fibrous tumors in the posterior uterine wall, being intimately connected with this organ, might, if examined without reference to the previous history of the case, be mistaken for hæmatocele, but with ordinary diligence in our investigation such an error would seldom if ever occur.

Extra-uterine pregnancy, in some of its characters, might resemble retro-uterine hæmatocele, but the mildness of the symptoms, some of them perhaps being those referable to ordinary pregnancy, the slowness of their development, and the detached and movable nature of the tumor, ought to distinguish it from an *encysted* hæmatocele at least.

The mistakes of Nélaton, Robert, Huguier, Dupuis, Stoltz, and Malgaigne, are referred to by the author, in proof of the great difficulty with which an accurate idea of the nature of these tumors can be arrived at in some cases. "A correct diagnosis will often be impossible until the trocar shall have entered their walls."

Treatment—Should be threefold—preventative, palliative, and curative.

If the author be correct in attributing these maladies to inflammation of the ovary and varicose veins within the folds of the broad ligaments, "*preventative treatment* demands *our first and most earnest attention.*" This will be best accomplished by local depletion, counter-irritation, and gentle laxatives.

Palliative treatment would consist in restoring the equilibrium of the circulation, combating the peritonæal complications by local depletion and other antiphlogistic measures, relieving pain by anodynes, and supporting the patient by proper nourishment.

(To be Continued.)

Dante.—The *Patrie* has made the notable discovery that Dante, the great Italian poet, was an apothecary. The name of the illustrious poet has been found in a register of the 15th century, figuring in a list of physicians and chemists, and inscribed in the number of the latter in 1282.—*Dub. Med. Jour.*

American Medical Times.

SATURDAY, OCTOBER 25, 1862.

TRIAL OF MRS. REAL.

The public in general was much interested last week in this trial. The medical profession had a still greater interest, which was to know whether the plea of moral insanity given by the accused (Mrs. Real) who had shot and killed her alleged husband, would be admitted or rejected. The celebrated Mr. James, late of London, was the defender; and Mr. Hall, District Attorney, though much younger, no less a lawyer of great learning and ability, was the prosecutor in the name of the people of New York. Now that a verdict of manslaughter in the third degree, with mitigating circumstances, has settled the question of moral insanity for a long time, we hope, it becomes the duty of the medical press to note how the medical evidence was understood and appreciated by the jury and the court, and finally, what were the grounds of accusation and defence, as well as the charge of the judge relating to moral insanity. The jury followed the opinion of the physicians, who declared they could find no symptoms of insanity; therefore we have only to examine the opinions of the learned gentlemen of the church and the bar.

It appears that several psychopathists had been subpœnaed, but on the suggestion of the Honorable Judge Barnard, two of our chief physicians and superintendents of lunatic asylums were called on the stand. Dr. Moses H. Ranney was the first physician examined; his evidence was clear, logical, and entirely scientific. It may be summed up in a few words—To prove the moral insanity of a person who has committed a crime under the influence of that disease, physical and mental signs must be recognised, and no physician of an asylum can rely on legal affidavits when he admits a patient into a lunatic ward. The defence wished to show that it was necessary to have seen the effect which the meeting of the prisoner's husband with another woman might have had on her impulses of volition, without which it appeared impossible to give an opinion on her sanity. But, we must observe that the defence, in saying this, pleaded a *transitory homicidal mania*, which is incompatible with the alleged *moral insanity;* such contradictions of the defence, and many other proofs of a complete ignorance of medico-legal psychiatry, have passed unobserved by jurists in this trial.

A curious incident happened in Dr. Ranney's cross-examination; a simple question, presented in an incidental form, remained almost without answer; the defence wished to know whether the demeanor (carriage, deportment, behavior) of the accused, as presented by the District Attorney, was consistent, before and subsequently to the act, with her nervous predisposition, her mental afflictions and perversions (suicidal), and with her frenzy when she met her alleged husband with another lady. This question had in view to establish a *transitory* homicidal mania—a disease almost impossible to imagine, since there are no prodroms, no phases of increase or diminution, *and no physical signs.* It is true, in certain manias and special diseases of volition, sudden attacks are remarked, but they are always preceded, accompanied, and followed by symptoms which leave not the slightest doubt as to their nature.

Dr. David Tilden Brown, of the Bloomingdale Asylum, gave a correct and just evidence; he stated that he concurred in general terms with Dr. Ranney's definition of moral insanity, which required symptoms both mental and physical. He said that he had found no indication of insanity in the case related by the District Attorney, and yet all these acts might be performed by an insane person; he saw nothing in the statement of facts that showed sanity or insanity; but such might not be his opinion if all the facts had been stated. Everybody, and certainly the jury, appreciated fully the just and humane reserve of Dr. Brown. The facts wanted were the symptoms legally observed and described at the moment of the commission of the manslaughter.

Instead of the invidious opposition which is so often noticed in the English courts, we have seen two physicians performing their difficult duty with the respect they hold to themselves and the medical profession.

We need not mention the talents, learning, and eloquence of Mr. James the defender, and of Mr. Hall the District Attorney. The Honorable Judge also made a very eloquent speech when he charged the jury; but, unfortunately, coming to the evidence given by our medical brethren, he said, "as to the medical testimony he did not consider it material; indeed he never deemed it important, for you seldom find two doctors agree except they belong to the same school."

Accordingly the Honorable Judge gave to the jury a medical opinion of his own as follows:—"There are two kinds of insanity; a permanent, total, and visible one, discoverable by acts, looks, manners, and conversation; or an impulsive one, that renders a person wholly irresponsible for every act termed lunacy. And the other insane on particular subjects not always visible, unless occasion offer, like Pyromania, Kleptomania, or what has been termed by recent writers impulsive insanity." Then his Honor said he had had the opportunity of seeing a remarkable instance of Kleptomania in Europe, and related it to the jury. We regret that a Judge on the Bench should indulge in medical theories which are not within his province. Especially is this true of a Judge who holds the following opinion. "I can conceive of a person who might not be accountable to his Maker and yet be perfectly accountable to human tribunals" This is a false theory: First, because God is the Supreme Justice, and human tribunals have been stained by the blood of many innocents, sane and insane; Secondly, because it admits that insanity, if only partial in its appearances, does not absolve the offender, or that the state of insanity must be permanent to admit irresponsibility.

If Mary Real had been insane she would have had many defenders in our profession; but as the facts existed, and were presented before the Court, she found impartial justice and pity from the physician, and justice and mercy from the court and jury.

THE WEEK.

In the Students' Number we published the regulations for admission and promotion in the Navy. We were not aware at the time of any more recent legislation on this subject than the Act of 1835. In another part of this

number will be found a copy of the Act of 1860, for which we are indebted to the courtesy of Surgeon Whelan, chief of the Bureau of Medicine and Surgery of the Navy Department. It will be seen by the table of compensation that the naval service offers great inducements to the recent graduate. We may add that the examination is at the same time rigid and fair; it embraces the classics, every branch of the physical sciences, and every department of medicine. To the student of high aims, who despises mediocrity, as every student ought, such a test of his capacity is but a healthful stimulus to exertion.

—

The lectures in the medical schools of New York are now all in progress of delivery. The attendance of students is, as we had anticipated, larger than last year, and the aggregate number is most flattering to the future state of medical teaching in this city.

—

The medical examiners of persons claiming exemption from the draft for physical disability, have been busily engaged in performing their duties in this city and Brooklyn during the past week. It is very generally remarked that few present themselves who have not real cause. The majority of diseases alleged are apparent, and require but a moment's examination to determine their nature. From present appearances not more than five per cent. of all who allege disability make false claims.

—

Pelvic hæmatocele is a disease to which hitherto but little attention has been directed by the profession, and consequently very little has been said upon this subject. It is for this reason that we call the attention of our readers, more especially those interested in the subject of uterine pathology, to the discussion upon this disease before the N. Y. Academy of Medicine, which we commence in this number by an abstract of Dr. Byrne's paper. We are confident that all who follow up the perusal in the succeeding numbers will be interested and instructed.

VERMONT MEDICAL SOCIETY.

This Society held its Annual Meeting at the State House, Montpelier, Wednesday and Thursday, October 15th and 16th, the President, Dr. A. S. Woodward, of Brandon, in the Chair. The Record of the last meeting having been read and approved, the Chair appointed Dr. S. Woodward, of St. Alban's, Clark, of Montpelier, and Stiles, of Windsor, a Committee on Credentials; and Dr. S. Chandler, of S. C., Albany, Russ, of Pomfret, and Houghton, of Pawlet, a Committee on Nominations.

The following gentlemen were elected members, D. R. Story, M.D., Proctorsville; N. W. Fairchild, M.D., Fulton; Geo. W. Nichols, M.D., Bethel; C.H. Tenny, M.D., Hardwick; E. G. Judkins, M.D., Waitsfield; E. P. Fairman, M.D., Walcott; J. E. Frink, M.D., Waterbury; W. W. Bralev, M.D., Chelsea; T. G. Simpson, M.D., Vershure; H.F. Crane, M. D., Ferrisburgh; Danl. C. Joslin, M.D., Waitsfield; Lester Kingsley, M.D., Moretown.

The credentials of Dr. Edwin M. Snow, Delegate from the R. I. Medical Society, were presented, and Dr. Snow was invited to sit with the Society and participate in the deliberations of the same. The following resolution was adopted: *Resolved*, That this Society send a Delegate to each New England State Society, and also to the N. Y. State Society, at their Annual and Semi-Annual Meetings, and report to this Society at its next subsequent meeting.

In accordance with a suggestion by Dr. Stiles, each member was called upon by the President for a statement of the diseases prevalent in his own practice and vicinity. Dr. Snow, the delegate from R. I. was called upon, and made some interesting remarks upon the condition of the R. I. Societies, and other matters of like connexion.

A great portion of the afternoon was taken up in the discussion, by members, of various diseases which have come to their attention. The following was adopted: *Resolved*, That each Member of the Society (in practice) be requested to report a written case treated by himself, at the Annual and Semi-Annual Meetings of the Society, said Reports to be kept on file by the Secretary, with a view to their publication with the Transactions of the Society.

Thursday, Oct. 16, 1862.

The Society met, pursuant to adjournment, the President in the Chair. The Committee on Nominations reported the following named gentlemen for officers for the year ensuing, which Report was accepted and adopted.

For President.—J. N. Stiles, M.D., Windsor.

For Vice-President.—A. S. Houghton, M.D., Pawlet.

Record. Sec'y. Wm. McCollom, M.D., Woodstock.

Cor. Sec'y. C. B. Chandler, M.D., Montpelier.

Lib. & Treasurer. Chas. Clark, Montpelier.

Delegates to Castleton Medical College. J. L. Chandler, M.D., St. Alban's, and Cullen Bullard, M.D., New Haven.

Delegates to Burlington Med. College, A. C. Welch, M.D., Williston; T. G. Simpson, M.D., Vershire.

Committee on Printing. H. F. Stevens, M.D., St. Alban's; C. L. Allen, M.D., Middlebury; and Joseph Perkins, M.D., Castleton.

Executive Committee. E. N. S. Morgan, M.D., Poronal; W. H. H. Richardson, M.D., Montpelier; and J. Crowley, M.D., Mount Holley.

Delegate to the New York Medical Society. R. C. Woodward, M.D., St. Alban's.

Delegate to R. I. Medical Society. Wm. McCollom, M.D., Woodstock.

Delegate to the Conn. Med. Society. J. N. Stiles, M.D., Windsor.

Delegate to Mass. Medical Society. C. M. Rubler, M.D., Montpelier.

Delegate to Maine Medical Society. Joseph Perkins, M.D., Castleton.

Delegate to N. Hampshire Medical Society. E. A. Knight, M.D., Springfield.

The following resolution was adopted:

Resolved, That the Vermont Medical Society recommend to the Legislature of said State, to authorize the Governor of the State to send to the Regiments of Vermont as many of the Lambert's new and Improved Tourniquets, as he in his judgment may deem best.

The following resolution was adopted:

Resolved, That this Society recommend to the Governor that the Board of Surgeons to examine Candidates for Regimental and Assistant Surgeons, be appointed from those of the profession who are not interested directly in our medical schools; and that the Secretary be instructed to transmit a copy of the resolution to the Governor.

Voted that the semi-annual meeting of the Society be holden at Woodstock, at such time in the month of June next as the Secretary shall designate.

The Annual Address by the President was delivered on Wednesday evening, in the Representatives' Hall, and was listened to with an attention rarely elicited on such occasions.

—

We observe that the "Société Universelle d'Ophthalmologie," of which Dr. Sichel is the President, will hold its next session in Paris on the 30th of the present month; and on the 1st, 2nd, and 3rd of October; in the Salle du Grand Orient de France, 16, rue Cadet. Cards of admission to the different sittings will be delivered on September 29th, from noon till four o'clock p.m.; and on the first day of the Session, from eight till ten o'clock a.m., at the house of the Secretary, Dr. Weeker, 3, Faubourg St. Honoré.—*Dub. Med. Press.*

Correspondence.

FOREIGN CORRESPONDENCE.

LETTER XIV.

By PROF. CHARLES A. LEE.

MINERAL SPRINGS.

VICHY, Aug. 9, 1862.

I HAVE already stated enough regarding the mineral waters of Vichy to show that they are not only more frequented by invalids than others in France, but probably also in Europe. There are other places to which the fashionable world more generally resort, as Baden; but none which attracts so many for the simple purposes of health.

The hospitals of the place, perhaps, deserve more particular notice. The Military Hospital is a very handsome structure, designed to accommodate one hundred and fifty patients, of whom about ninety at present are officers, and sixty subalterns and soldiers. The average duration of the water treatment for each patient is forty days; so that nearly six hundred individuals connected with the army are subjected to it every season. Every officer has a conveniently furnished room, and there are commodious and well fitted up dining and assembly rooms, etc. Indeed, I have never seen anything superior to the arrangement of the piscinæ, baths, and douches—the latter being worked by a compressed air machine by steam power; one spring, *Lucas*, rises near to the hospital, and this is connected with another (*des acacias*) which formerly had a separate outlet. Behind the thermal establishment, and beneath the peristyle, are three other springs, viz. the *Puits Chomel* in the centre; the *Grand Grille*, rising in a large railed basin at one end; and the *des Mesdames*, to which the water is conveyed by tubes, at the other; while adjacent to the establishment is a building containing reservoirs for cooling the water used for the baths, and the laboratory where the Vichy Salts are manufactured.

Besides this, there is a Civil Hospital under the charge of the Sisters of Charity. The thermal establishment connected with it also contains numerous bath-rooms and douches, supplied by the hospital spring already mentioned, which rises in the court in a large circular basin surrounded by a handsome railing.

The principal establishment is of white fine-grained sandstone, one story high, built with considerable architectural taste, its principal façade, with arcade, fronting the Park, the ground-floor being occupied by the numerous bathing rooms, on either side of spacious galleries and waiting rooms, conveniently fitted up, the bathing tubs being of copper lined with tin. One side is appropriated to ladies, the other to gentlemen. The first floor, as it is called, is consecrated to recreation, having a large ball-room; a music rotunda, where Strauss's band plays every day, and where concerts and other entertainments are given; and a small theatre for vaudevilles and other light dramatic productions. There are also reading, billiard, and card-rooms, etc. There are over seventy hotels and one hundred lodging-houses in Vichy, and generally they are all filled during the bathing season. Hearing I might not find accommodations, and seeing a large sign over a spacious Caravansary, "GRAND HOTEL OF THE UNIVERSE," I at once concluded there would be sufficient room there for me, and I was not disappointed; for, in the "*quatrième étage*" I found a snug, well furnished cabinet, which I at once appropriated; and this was the last vacant space in the whole "Universe."

There are spacious dining-rooms in all these hotels, and a *table-d'hôte*, at which from sixty to a hundred or more dine; they also are furnished with large saloons where the boarders or lodgers meet and pass the evening with occasional music, dancing, etc. This is a great improvement on the German baths and watering-places, which only have their public *Cursaals*. There are frequent *reunions* at the different hotels, and public balls weekly, while the band plays every day in the park, and in the music saloon in the evening. The great objection to the place, however, to me, is its excessive heat in July and August, to say nothing of the dust when the wind blows.

At present, there are eleven distinct springs or fountains, all highly alkaline, and all of an elevated temperature, except three, viz. Celestins, Lardy, and Mesdames. The *bicarbonate of soda* is the principal ingredient, and nearly all are used both for drinking and bathing. It has been ascertained that if the earth for some distance around the springs is penetrated to the depth of ten *kilometres*, analogous mineral water is discovered; so that the soil beneath the argillaceous layer that lies above may be regarded as a sponge which receives the mineral waters in their ascent, and transmits them to the surface either by means of natural artesian wells, or through boring tubes. It is computed that the amount of salt daily supplied by the springs, most of which is lost in the allier, amounts to more than 5,100 kilogrammes. The temperature of these springs, as well as the amount of salts contained in them, varies somewhat at different times. For instance, the Grand Grille, which is by far the most important of all, had a temperature in 1743 of 48 (centigrade); in 1820, of 38; in 1844, 32; in 1848, 42. The temperature of the other springs at present is as follows: Puits carré, 45; Puits Chomel, 42; Hôpital, 31; Lucas, 30; Celestins, 22; Lardy and Mesdames, 22. The water of the warm springs is perfectly limpid, without smell, and of a strongly alkaline and slightly acidulous taste, though immense quantities of carbonic acid gas are given off, especially by the Grand Grille—and yet it does not sparkle at all in the glass. The strongest springs, as Lucas, Puits Carré, and Celestins, contain about 45 grains of soda to the pint of water. The Puits Carré, used exclusively for baths, contains in a LITRE, or two pints 17 cubic inches of *carb. acid;* 90 grs. *bi-carb. soda;* 10 grs. *muriate of soda*, and 8 grs. *sulphate of soda;* with small quantities of lime, magnesia, silex, iron, and a vegeto-animal substance *glaieine*, which is seen to cover the edges of the basin of the hospital and some of the other springs. Some, as the Lucas, are slightly impregnated with sulphur, and some, as the Hauterive and Des Dames, contain a considerable amount of the bicarbonate of protoxide of iron—all contain a trace of organic matter.

As to the remedial properties of the Vichy, all agree that they are highly alterative and diuretic. Although the bicarbonate of soda is undoubtedly the principal active ingredient, yet the same effects are not produced by the same quantity of the salt dissolved in water, which shows that the water is not a simple alkaline solution, but a peculiar compound, which cannot be exactly imitated. This may either be owing to its containing substances not revealed by analysis, or to the peculiar mode of combination.

The urine is said to be rendered alkaline after drinking three or four glasses, or even after taking a protracted bath. Patients generally are directed to bathe in, as well as drink the water; though for the former purpose it is generally diluted with common water to prevent its being too stimulating.

The waters are believed, by those who have resided on the spot and watched their effects for years, to be adapted to a variety of pathological conditions—a much greater, indeed, than would be inferred from their chemical analysis. The most experienced physician here says, you cannot tell, *à priori*, what their precise effects will be, each case must be studied by itself, and we have to feel our way through the whole course. This is probably pretty near the truth, and will apply to other mineral waters besides those of Vichy. The principal water drunk is that of the Grand Grille, which has a high temperature, and it seems to me that a good deal of the effects may be attributed to this circumstance. Most of those who drink it tell me that it does not operate at all on the bowels, but excites the appetite and improves the digestion, while it always acts more or less on the kidneys. These effects were verified in my own case. I am satisfied, however, that too much of the

water is often drunk, for those who indulge very freely in its use often complain of a sense of giddiness and fulness about the head, sleepiness, stupidity, unpleasant sensations about the liver or kidneys, with a sense of weakness and general loss of tone. Patients too often go on the principle that if a little does good, a great deal will do still more, and so, by excess, defeat the very object in view. There can be no doubt, I think, that a general cachectic condition, attended with great debility, may and often does exist from the excessive and too protracted use of these alkaline waters. Many come here and drink them freely without consulting any physician, to save expense, and the consequence is they lose what health they had when they came, and then abuse the waters for their own imprudence. The fact is, that mineral waters are generally used with too little care and discrimination, for they are powerful agents for good or ill. Trousseau has specially alluded to the abuse of these waters in the treatment of gout, for which they are generally recommended, even in debilitated states, and where there is a tendency to a cachectic condition, or even dropsical effusion. In all such cases they must do more or less mischief. In opposite states, attended with acidity of the secretions, and too great plasticity of the blood, they may, if used moderately, prove beneficial. Where stimulants are freely used and too much animal food taken, small doses of Vichy water counteract to a considerable extent the injurious effects they might otherwise produce. They are, however, far from being as prejudicial or dangerous as a simple alkaline solution of the same strength. These waters are generally recommended by French physicians in gout, and a variety of deranged states of the digestive organs, abdominal engorgements or obstructions, chronic enlargements of the liver and spleen, the sequelæ of intermittents and remittents, slow fevers from chronic affections of the mucous membrane, acidity of the stomach, calculus and other diseases of the urinary organs, uterine derangement, and in some cases of chronic rheumatism and cutaneous affections. But the proper application of these waters, I am satisfied, is a great science, and requires vast experience. Each spring is a study in itself. Each case is experimental. In a gentleman, for instance, in Paris, in whose case I was consulted, and who was troubled with pains in the lumbar region and irritation of the urinary organs, the least quantity of Vichy water increased the pain and irritation, and nothing was found to afford so much relief as flax-seed tea and slippery elm. I may refer to this subject again when I come to speak of the Carlsbad and other German mineral waters of the alkaline kind.

But I have not space to enter on this subject at length, which would require no small-sized volume to do it justice.

It is a significant fact that those best acquainted by experience with the effects of the Vichy waters, prescribe them in fewer cases, in smaller quantities, and with greater caution than any other practitioners. But is not this the case with all physicians, and in regard to all powerful remedies?

Army Medical Intelligence.

LIST OF THE NAMES OF SURGEONS AND ASSISTANT SURGEONS APPOINTED TO THE VOLUNTEER REGIMENTS OF THE STATE OF NEW YORK, SINCE MAY 31, 1862, AND THE CHANGES WHICH HAVE OCCURRED IN THE REGIMENTS IN THE FIELD FROM THE SAME DATE.

(*Continued from page 223.*)

Sept. 1st.—Edwin Amsden, Assist. Surgeon 2d Regt., 80th Dist., (new Regt.); Edgar C. Bass, Assist. Surgeon 2d Regt., 19th Dist. (new Regt.); Carey W. Howe, Assist. Surgeon 116th Regt., 31st Dist., (new Regt.); Charles F. Warner, Assist. Surgeon 2d Regt., 30th Dist. (new Regt.); John C. Patterson, Assist. Surgeon 130th Regt., 30th Dist. (new Regt.) Sept. 2d.—Henry Dhane, Assist. Surgeon 69th Regt.; William B Eagan, Jr., Surgeon 3d Regt. Metropolitan Guard (new Regt.); Joseph I. Hasbrook, Assist. Surgeon 4th Regt. Empire Brigade (new Regt.) Sept. 3d.—John Knowlson, Surgeon 2d Regt., 12th Dist. (new Regt.); Charles Brueninghausen, Surgeon 119th Regt. (new); John M. Farrington, Surgeon 2d Regt., 24th Dist. (new Regt.), Jeffrey R. Thomas, Assist. Surgeon 112th Regt., 32d Dist. (new Regt.) Sept. 4th.—George B. Parker, Assist. Surgeon 42d Regt.; John A. Robinson, Assist. Surgeon 38th Regt.; Marvin C. Rowland, Assist. Surgeon 61st Regt.; Robert V. K. Montfort, Assist. Surgeon 124th Regt., 9th Dist. (new Regt.); Asahel Burt, Jr., Assist. Surgeon 139th Regt., Col. Conk's (new Regt.); Elbert M. Somers, Assist. Surgeon 2d Regt., 19th Dist. (new Regt.); Arnold Stubb, Assist. Surgeon 9th Regt. Sept. 5th.—Augustus C. Walker, Assist. Surgeon 2d Regt. Metropolitan Guard (new Regt.); Rykeman D. Bogert, Assist. Surgeon 135th Regt., 8th Dist., (new Regt.); Edward G. Marshall, Assist. Surgeon 124th Regt., 9th Dist. (new Regt); Albert Utter, Assist. Surgeon 36th Regt. Sept. 6th.—William B. Schermerhorn, Assist. Surgeon 37th Regt.; Wesley T. Rice, Assist. Surgeon 142d Regt., 17th Dist. (new Regt.); Orestes C. Gibbs, Assist. Surgeon 21st Regt., vice Joseph A. Peters, promoted; John Dwyer, Surgeon 69th Regt., Corcoran's Brigade (new Regt.); George G. Benson, Surgeon 2d Regt., Columbia Co. (new Regt.); John Monypenny, Surgeon 123d Regt., Washington Co. (new Regt.) Sept. 8th.—Silas S. Cartwright, Assist. Surgeon 134th Regt., 14th Dist. (new Regt.); Calvin H. Carpenter, Assist. Surgeon 148th Regt., 2d Regt. 26th Dist. (new Regt.); Louis Applegate, Assist. Surgeon 162d Regt. Sept. 9th.—Morgan Lewis, Assist. Surgeon 82d Regt.; David Larrabee, Assist. Surgeon 86th Regt.; Lewis Darling, Assist. Surgeon 34 Regt., 37th Dist. (new Regt.); James F. Ferguson, Surgeon 2d Batt., 5th Regt. (new); Edward Storck, Surgeon Buffalo German Regt. (new); Willard R. Fitch, Assist. Surgeon 82d Regt., vice James F. Ferguson, discharged. Sept. 10th.—Edward C. Mundy, Surgeon Col. Minthorne Tompkins' Regt. (new); Henry G. Bates, Assist. Surgeon 13st Regt., 1st Metropolitan Guard (new Regt.); Stephen G. Cook, Assist. Surgeon 150th Regt., Dutchess Co. (new Regt.) Sept. 11th.—James R. Leal, Surgeon 144th Regt., Delaware Co. (new Regt.); Cornelius B. O'Leary, Assist. Surgeon 145th Regt., Col. Allen's (new Regt.); Samuel B. Olmstead, Assist. Surgeon 4th Dist. Regt. (new); Stephen S. Lounsbery, Assist. Surgeon 4th Dist. Regt. (new); Richard Connolly, Assist. Surgeon 128d Regt., Washington Co. (new Regt.); John W. Gray, Assist. Surgeon 98th Regt.; Niles Goodyear, Assist. Surgeon 82d Regt.; Andrew Melville, Assist. Surgeon 79th Regt. Sept. 12th.—C. Judson Hill, Assist. Surgeon 91st Regt.; Frank C. Seelye, Assist. Surgeon 148th Regt., 2d Regt. 26th Dist. (new Regt.); George C. Hubbard, Assist. Surgeon 2d Batt. 5th Regt. (new); Cyrus Towers, Surgeon 3d Regt., 25th Dist. (new Regt.) Sept. 13th.—A. Walter Tryon, Assist. Surgeon 100th Regt.; Henry C. May, Assist. Surgeon 145th Regt. (new); Robert Rae, Assist. Surgeon 135th Regt. (new); Wm. Wood Squire, Assist. Surgeon 131st Regt. (new); Wm. Francis Cutland, Assist. Surgeon 132d Regt. (new). Sept. 16th.—John Quincy Adams, Surgeon 2d Regt., 8th Dist. (new Regt.) Sept. 17th.—Andrew J. Willets, Surgeon "Ironsides Regt." (new); John T. Brown, Assist. Surgeon 105th Regt.; John N. Miller, Assist. Surgeon 120th Regt., 10th Dist. (new Regt.) Sept. 18th.—D. Wellington Onderdonk, Assist. Surgeon 131st Regt., 29th Dist. (new Regt.); Jacob V. K. Schoeckel, Assist. Surgeon 103d Regt.; Thomas H. Stillwell Assist. Surgeon 39d Regt., vice William A. Madill promoted; Joseph T. Skinner, Assist. Surgeon 169th Regt., 2d Regt. 13th Dist. (new Regt.); Moses T. Babcock, Assist. Surgeon 141st Regt., 2d Regt. 27th Dist. (new Regt.) Sept. 19th.—Louis Kleine, Assist. Surgeon 3d Batt. of Artillery, vice Conrad Joachim deceased; Horace Nims, Assist. Surgeon 149th Regt., 2d Regt. 22d Dist., new Regt.)

War Department, Adjutant-General's Office, Washington, October 11, 1862.

SPECIAL ORDERS, No. 289.

2. The following assignments are made of Medical Officers:—

Surgeon A. K. Smith, U.S.A., to relieve Surgeon George E. Cooper, U.S.A., as Medical Purveyor in Philadelphia, the latter, on being relieved, to proceed to the Head Quarters of General Buell's Army, and relieve Surgeon Robert Murray, U.S.A., as Medical Director of that Army.

Surgeon Robert Murray, on being relieved, will repair to Philadelphia and report to Surgeon W. S. King, as Medical Director of Transportation.

Assist. Surgeon B. A. Clements, U.S.A., will report to the Medical Board in Philadelphia for examination for promotion.

Surgeon Ira Russell, U. S. Vols., will report in person to the Assist. Surgeon-General in St. Louis, for orders.

* * * *

16. Surgeon Wm. P. Russell, 15th Vermont Vols., is hereby discharged the service of the United States.

* * * *

18. The following assignments are made of Medical Officers:—

Surgeon Paul B. Goddard, U. S. Vols., to report in person to Surgeon W. S. King, U.S.A., Medical Director at Philadelphia, Pa.

Surgeon D. H. Agnew, U. S. Vols., to report in person to Surgeon W. S. King, U.S.A., Medical Director at Philadelphia, Pa.

Surgeon A. B. Crosby, U. S. Vols., to report in person at General McClellan's Head Quarters.

Surgeon J. Hopkinson, U. S. Vols., to report in person to Surgeon W. S. King, U.S.A., Medical Director at Philadelphia, Pa., to take charge of Chestnut Hill Hospital.

Surgeon Clayton A. Cowgill, U. S. Vols., to repair to Newbern, N. C., and relieve Surgeon G. Denny, 23d Mass.

Vols., in charge of the Academy General Hospital in that city. Surgeon DERBY, when relieved, will join his regiment.

Surgeon B. B. BREED, U. S. Vols., to repair to Newbern, N. C., and relieve Surgeon G. A. OTIS, 27th Mass. Vols., in his duties at that place. Surgeon OTIS, when relieved, will join his regiment.

Surgeon S. D. FREEMAN, U. S. Vols., to report in person to Surgeon SIMPSON, U.S.A., Medical Director at Baltimore, Md., to relieve Surgeon R. W. PEASE, 10th New York Cavalry, in charge of General Hospital, Patterson Park.

Surgeon Israel Moses, U. S. Vols., to report to the Medical Director at Washington, D.C., for duty in Harewood Hospital.

Assist. Surgeon S. S. MULFORD, U. S. Vols., to proceed to Point Lookout, Md., and report to Assist. Surgeon CLINTON WAGNER, U.S.A., in charge.

Assist. Surgeon F. A. KEFFER, U. S. Vols., to report in person to Surgeon W. S. KING, U.S.A., Medical Director, for duty in West Philadelphia Hospital.

Assist. Surgeon A. MAJER, U. S. Vols., to report in person to Maj. Gen. MITCHELL, at Hilton Head, S. C.

Assist. Surgeon G. A. WHEELER, U. S. Vols., to report in person to Surgeon T. A. McPARLIN, U.S.A., at General Hospital, Annapolis, Md.

Assist. Surgeon W. Moss, U. S. Vols., to report to Surgeon LETTERMAN, Medical Director Army of the Potomac, for special duty.

Assist. Surgeon J. H. BREWER, U. S. Vols., to report in person to Surgeon T. A. McPARLIN, U.S.A., at General Hospital, Annapolis, Md.

Assist. Surgeon G. L. SUTTON, U. S. Vols., to report to the Medical Director at Washington, D.C., for duty in the Douglas Hospital.

Assist. Surgeon P. CLEARY, U. S. Vols., to report to the Medical Director at Washington, D.C., for duty in the Carver Hospital.

Assist. Surgeon A. H. SHELDON, U. S. Vols., to report to the Medical Director at Washington, D. C., for duty in his office.

Assist. Surgeon G. E. PATTEE, U. S. Vols., to report to the Medical Director at Washington, D.C., for duty.

Assist. Surgeon W. A. CONOVER, U. S. Vols., to report to the Medical Director at Washington, D.C., for duty in the Armory Hospital.

Assist. Surgeon C. S. FRINK, U. S. Vols., to report to the Medical Director at Washington, D.C., for duty in the Carver Hospital.

Surgeons HENRY J. CHURCHMAN, BARTON DARRACH, H. A. MARTIN, and J. R. McCLURG, and Assist. Surgeons A. C. VAN DUZEN, S. B. DAVIS, and E. DODD, U. S. Vols., to proceed to St. Louis, Mo., and report to Assist. Surgeon-General R. C. WOOD, for duty.

By order of the Secretary of War.

E. D. TOWNSEND,
Assist. Adjutant-General.

Assist. Surgeon A. F. MECHEM, U.S.A., has been assigned to duty at Benicia Barracks, California.

Surgeon W. J. SLOAN, U.S.A., lately Medical Director in New York, has arrived at St. Paul, Min., and entered upon the duties of Medical Director of the Department commanded by Major Gen. POPE.

Surgeon BASIL NORRIS, U.S.A., is en route from Fort Craig, N. M., to Washington, D.C., under orders to report to the Surgeon-General.

Assist. Surgeon R. K. TUTHILL, 20th New York Vols., has been granted thirty days' leave of absence on Surgeon's certificate of disability.

During the absence of Assist. Surgeon C. T. ALEXANDER, at Philadelphia, Pa., to which city he has been ordered for examination for promotion, Assist. Surgeon SCHENCK has been detailed to act as member of the Army Medical Board at St. Louis.

Assist. Surgeon T. W. WILLIAMS, U.S.A., has been placed on duty in charge of the Trinity Church Hospital, Washington, D.C.

Assist. Surgeon B. HOWARD, U.S.A., is on duty as Medical Purveyor at Sharpsburg, Md.

Medical Storekeeper R. T. CREAMER, U.S.A., has arrived at St. Louis, and entered upon his duties in the Purveying Department.

Leave of absence for twenty days has been granted to Dr. A. H. HAVEN, Act. Assist. Surgeon, U.S.A.

Surgeon M. GOLDSMITH, U. S. Vols., has been assigned to duty as Assist. Medical Director at Louisville, Ky.

Surgeon GEORGE HAMMOND, U.S.A., recently returned from a six years' tour of duty in the Pacific Department.

Dr. NATHAN WEBB, Act. Assist. Surgeon U.S.A., has been directed by the Surgeon-General to report for duty to Surgeon J. J. MILHAU, at Frederick, Md.

Surgeon T. F. GALLOUPE, 13th Mass. Vols., has been placed on temporary duty in the city of Washington, while awaiting examination for appointment in the corps of Volunteer Surgeons.

Assist. Surgeon WM. C. FOSTER, 13th Indiana Vols., has been dismissed from the service of the United States.

Surgeon JOHN E. SUMMERS, U.S.A., is on leave of absence at Altoona, Pa.

Assist. Surgeon C. K. WINNE, U.S.A., has arrived at Evansville, Indiana, and assumed charge of the hospitals there.

Surgeon THOMAS ANTISELL, U. S. Vols., has been placed in charge of the Harewood Hospital at Washington.

Surgeon W. W. NASSAN, U. S. Vols., has been assigned to the hospital of the Sisters of Charity, St. Louis.

Surgeon DANIEL MEEKER, U.S.A., reports on duty with General MILROY's brigade, Point Pleasant, Va.

Surgeon BERNARD VON BAIST, U. S. Vols., has been assigned to the charge of the General Hospital at Locust Spring, near Keedysville, Md.

Surgeon GEORGE SUCKLEY, U. S. Vols., has been placed on duty in the office of the Medical Director of the Army of the Potomac.

Surgeon LEWIS A. EDWARDS, U.S.A., has returned to Portsmouth Grove, R. I., having been summoned to Washington some time since on business connected with the General Hospital under his charge.

Assist. Surgeon J. B. HOOD, 75th Ohio Vols., now on duty at Columbus, Ky., has been directed to join his regiment.

Surgeon STEWART and Assist. Surgeon BOUTILLIER of the 1st Minnesota Vols. are directed to be mustered out of service.

The resignation of Assist. Surgeon J. F. KENNEDY, U.S.A., has been accepted to take effect October 10, 1862.

Leave of absence for thirty days from Nov. 1st. has been granted to Assist. Surgeon McKINNEY, 57th New York Vols.

Assist. Surgeon C. C. GRAY, U.S.A., has been detailed to establish and take charge of General Hospital, Wilmington, Del.

Assist. Surgeon W. T. ORJE, U.S.A., has been assigned to General Hospital, Chester, Pa.

Surgeon C. C. GORDON, 1st N. J. Vols., has been assigned to duty as Medical Director at Trenton, N. J.

A Medical Board for the examination of such Medical Officers as may be reported to be professionally incompetent, has, at the request of the Medical Director Letterman, been convened at the Headquarters of the Army of the Potomac. Surgeons G. Suckley and P. Pineo, U.S. Vols., and Asst.-Surgeon Wilson, U.S.A., compose the board.

Owing to the approach of cold weather, the Medical Director at New York has been authorized to transfer eight hundred sick from David's Island to Fort Schuyler. It is also contemplated to remove all the sick of the Army from Bellevue Hospital.

The Act of Congress approved May 20, 1862, creating the Corps of Medical Storekeepers, provides that they shall have the pay and emoluments of Military Storekeepers of

the Quartermaster's Department, and they are therefore entitled to the fuel and quarters of First Lieutenant of the Army in kind, and in kind only.

The Surgeon-General has instructed the Medical Directors at New York, Philadelphia, and Baltimore, to collect in one hospital in each city all mutilated soldiers needing artificial limbs, so that they may be measured and fitted with such as speedily as possible.

The building on the corner of Ninth and Tattnall Streets, Wilmington, Delaware, has been selected for a hospital. The Quartermaster-General has been requested to rent it, and to erect suitable sheds for kitchen, laundry, etc.

It is in contemplation to erect a new General Hospital at Evansville, Indiana, the plans for which have been submitted to the Quartermaster-General.

REGULATIONS FOR ADMISSION AND PROMOTION IN THE MEDICAL DEPARTMENT OF THE NAVY.

It is prescribed by law that no person shall be appointed in this branch of the service who has not been examined and found qualified by a board of Naval Surgeons, designated by the Secretary of the Navy.

A board of Naval Surgeons will be assembled annually, at such place as may be indicated by the Department, usually about the close of the lecture season of the colleges, for the examination and selection of candidates for admission into the Medical Corps of the Navy, as well as for the examination of Assistant Surgeons who may be candidates for promotion.

Application for permission to attend the examination for admission to the Medical Corps of the Navy must be addressed to the Secretary of the Navy, stating the age and residence of the applicant, and be accompanied by respectable testimonials of his possessing the moral and physical qualifications requisite for filling creditably the responsible position of a Medical Officer of the Navy.

The application of no one will be considered who is under twenty-one or over twenty-six years of age.

The permission will state the time and place of the meeting of the board.

The board rigidly scrutinizes the physical qualifications of each candidate, as well as his moral, mental, and professional fitness for the Naval Service; and reports favorably upon no case admitting of a reasonable doubt, as the health and the lives of the officers of the Navy are objects too important to be intrusted to ignorant or incompetent persons.

The board reports the relative merit of the candidates as shown by the examination; and appointments will be made in the Navy as vacancies may occur, in the order in which they may be reported by the board.

No qualified candidate will be held over for appointment beyond one year; if not appointed within that time, it will be necessary for a candidate to be re-examined, when he will take position with the class last examined.

Physical examination will precede the professional; no candidate not physically qualified for the active duties of the service will be examined professionally. The board will make a separate report in each case of the physical condition *direct* to the Department, to be placed on file with the testimonials of the candidate.

No allowance is made for the expenses of persons undergoing these examinations, as they are indispensable prerequisites to appointment.

After five years' service in the Navy, at least two years of which shall have been passed "on board a public vessel of the United States at sea," Assistant Surgeons shall be entitled to an examination for promotion.

In order that the relative position of Assistant-Surgeons of the same date, who shall be examined for promotion at different times, may be more readily determined, a majority of the members of the board will be selected, if practicable, from those who served on the next preceding board.

Assistant Surgeons, who are candidates for promotion, shall present to the board testimonials of correct deportment and habits of industry from the Surgeons with whom they have been associated on duty; also, a Journal of Practice, or Case Book, in their own hand-writing. They are expected to be familiar with all the details of duty specified in the "Instructions for the government of Medical Officers."

Any Assistant Surgeon who shall fail to present himself for examination after he has been ordered (unless for reasons which may be satisfactory to the Department), or who, after examination, shall be reported by the board as "not qualified" for promotion, shall be dropped from the list of Officers of the Navy.

GIDEON WELLES, *Secretary of the Navy.*

COMPENSATION.—The pay of Assistant Surgeons and Surgeons is established by act of Congress, approved on the 1st of June, 1860, and is as follows:

FLEET SURGEONS	$3,300 00
SURGEONS—	
On duty at sea—	
For first five years after date of commission as surgeon	2,200 00
For second five years after date of commission as surgeon	2,400 00
For third five years after date of commission as surgeon	2,600 00
For fourth five years after date of commission as surgeon	2,800 00
For twenty years and upwards after date of commission	3,000 00
On other duty—	
For first five years after date of commission as surgeon	2,000 00
For second five years after date of commission as surgeon	2,200 00
For third five years after date of commission as surgeon	2,400 00
For fourth five years after date of commission as surgeon	2,600 00
For twenty years and upwards after date of commission	2,800 00
On leave or waiting orders—	
For first five years after date of commission as surgeon	1,600 00
For second five years after date of commission as surgeon	1,800 00
For third five years after date of commission as surgeon	1,900 00
For fourth five years after date of commission as surgeon	2,100 00
For twenty years and upwards after date of commission	2,300 00
PASSED ASSISTANT SURGEONS—	
On duty at sea	1,500 00
On other duty	1,400 00
On leave or waiting orders	1,100 00
ASSISTANT SURGEONS—	
On duty at sea	1,250 00
On other duty	1,050 00
On leave or waiting orders	800 00

FORM OF APPLICATION.

, 186

To the Secretary of the Navy:

I respectfully make application for examination as to my qualifications for appointment as Assistant Surgeon in the United States Navy. I was years of age, on the day of , 186 , and reside in , county of and State of . I forward herewith testimonials of moral and physical qualifications.

Very respectfully,

POTHOUSE POISON.—A young man named Flasschoen very narrowly escaped being poisoned last week at Brussels from drinking the first glass of beer drawn from the counter machine at a public-house. It is usual to throw away the beer which has remained in the metal pipes all night, but this precaution had been neglected in the present instance. The liquor was so strongly impregnated with the metallic poison that the young man's recovery was considered hopeless for several hours.—*Dub. Med. Press.*

WHEN a patient is in a sinking state from disease, and when a medical man has thought an alcoholic stimulant absolutely necessary to snatch the patient from death, in this case the great danger is, that such a stimulant will extinguish the small spark of life remaining, and that the patient will be destroyed. It was truly said of the Brunonian system, "that Dr. Brown had made no provision in his system for the recovery of exhaustion arising from the effects of taking alcoholic stimulants." Lord Bacon observes: "If the spirit is assailed by another heat stronger than its own, it is dissipated and destroyed."—*Mr. Higginbottom, in Brit. Med. Jour.*

Original Lectures.

LECTURES
ON THE
DIAGNOSIS OF DISEASES OF THE HEART.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE DURING THE PRELIMINARY TERM.
SESSION 1862-63.

BY AUSTIN FLINT, M.D.
PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE IV.

Means of Discriminating the First and Second Sound of the Heart, in order to Determine the Relations of the Murmurs to the Heart-Sounds.—Recapitulation of these Relations.—The Extent of Information respecting Valvular Lesions, obtained by means of the Murmurs.—The Diagnosis of Mitral Lesions, Obstructive, Regurgitant, and Innocuous.—The Mitral Direct Murmur; the Situation of its Maximum of Intensity, and the Direction in which it is Propagated.—The Mitral Regurgitant Murmur; Situation of its Maximum, etc.—The Occurrence of this Murmur without Actual Regurgitation, and hence the Propriety of calling it a Mitral Systolic Murmur, either Regurgitant or Non-Regurgitant.—Means of Determining whether it denote Regurgitation or not.—Effects of Mitral Obstruction and Regurgitant Lesions on the Heart.—Symptoms Due to these Effects.—Pulse.—Cough and Expectoration.—Dyspnœa.—Pain.—Palpitation.—Irregular Pulse.—Lividity.—Dropsy.—Modes of Dying.

GENTLEMEN:—In my last lecture I described the four blood-currents pertaining to health and disease, and the corresponding murmurs, limiting our attention to the left side of the heart, valvular lesions being situated in this side in the great majority of cases. I commenced to consider the points involved in the localization of these murmurs, with a view to the diagnosis of valvular lesions. I was able, in that lecture, to present only the first of the several points which the localization of the murmurs, or the diagnosis of these lesions, involves, viz. determining their connexion, respectively, with the first or second sound of the heart. In all cases, after having ascertained the existence of a murmur, or murmurs, the first thing to be done is to determine when the murmur, or murmurs, occur as regards the heart sounds. In order to do this, of course it is requisite to discriminate the first and second sound. Usually the rhythm of the sounds suffices for this discrimination: the two sounds succeed each other with a scarcely appreciable interval, and then follows a distinct interval. The rhythm, I repeat, usually suffices, and, in addition, we have, frequently the distinctive characters of each sound to aid in the discrimination. But in some cases it is not easy to decide which is the first and which the second sound. This occurs when the heart acts with great rapidity, and the characters which distinguish the sounds from each other are, in a great measure, lost. I have a case of this kind now in one of my wards. In that case, as you will see when I call your attention to it at the bedside, the sounds recur so quickly that the normal rhythm is not readily appreciable, and the first sound differs but little from the second. Now, in such cases, there are two modes which we may employ in determining which is the first and which the second sound. One mode is to place the finger over the apex, and feel the apex-beat while we listen to the sounds. The sound which we find to be synchronous with the apex-beat is, of course, the first sound. This mode is not always available, for the apex-beat is not appreciable in all cases. The other mode is more uniformly available. It consists in placing the finger over the carotid artery, and observing which sound occurs synchronously with the carotid pulse. The carotid pulse and the first sound are synchronous. This is not true of the radial pulse; an appreciable interval elapses between the first sound and the pulse at the wrist, and hence the latter is not a guide.

Reverting to the murmurs considered in my last lecture, the mitral direct murmur takes place just before the first sound of the heart, the apex-beat and the carotid pulse; the mitral regurgitant murmur and the aortic direct murmur accompany and follow the first sound, the apex-beat and the carotid pulse; the aortic regurgitant murmur accompanies and follows the second sound of the heart. Of these murmurs, two denote, from their relations to the heart-sounds alone, the situation of valvular lesions, viz. the mitral direct and the aortic regurgitant. The remaining two murmurs occurring in the same connexion with the heart-sounds, other points are necessary for their discrimination; and, with regard to all the murmurs, other points than the time of their occurrence are brought to bear upon their discrimination. Before proceeding to speak of these, let us consider how far the murmurs are capable of leading us in the diagnosis of valvular lesions.

We have seen that valvular lesions may involve, first, obstruction of the mitral and aortic orifices; second, insufficiency of the valves protecting these orifices, and consequent regurgitation; and, third, mere roughening of the surfaces without either obstruction or regurgitation. In the latter case the lesions are comparatively innocuous; they are serious, other things being equal, in proportion to the amount of either obstruction or regurgitation, or both combined. Now, the murmurs generally enable us to determine, in the first place, the existence of valvular lesions; in the second place, their situation, whether in the aortic or mitral orifice, or in both these situations; in the third place, the existence of valvular insufficiency or of regurgitation; and, in the fourth place, in some cases, the existence of obstruction. These four points of information are not only of interest, but of great practical importance. The murmurs thus lead us a good way in diagnosis, but still not so far as we could desire, and as we are able to go by combining with the knowledge afforded by the murmurs, facts pertaining to other signs and symptoms. The murmurs alone, as we shall hereafter see, do not afford us much information respecting the amount of obstruction or regurgitation, and consequently of the gravity of the valvular lesions.

Proceeding to consider more fully the diagnosis of valvular lesions, we will take up first those seated at the mitral orifice. Here is a specimen illustrating both contraction and patescency of this orifice. It was taken from the body of a patient who recently died at Blackwell's Island Hospital. The patient was examined by me, and the diagnosis made some time before his death. You will recollect there are two murmurs emanating from this orifice, viz. the mitral direct and the mitral regurgitant. The mitral direct murmur generally denotes mitral obstruction. With some exceptions, to which I shall hereafter refer, we base the diagnosis of obstructive lesions situated at the mitral orifice, on the presence of this murmur. I wish you to take note of this murmur especially, for some distinguished auscultators deny its existence. When the points involved in its recognition are clearly apprehended, it is as easily recognised as either of the four murmurs. No other murmur occurs in the same relation to the heart-sounds; it is, as we have seen, pre-systolic in the time of its occurrence. I have three cases under my observation in Bellevue Hospital presenting this murmur, and I shall give you all an opportunity of hearing it at my next clinical lecture. Aside from its being pre-systolic, there is generally a distinctive character in the sound itself. It is usually somewhat rough, resembling the sound produced by throwing the lips into vibration with the expired breath. When this character of sound is strongly marked, I have called it a blubbering murmur. This character of sound I suppose to be due to the vibration of the curtains which compose the mitral valve. It is heard with its maximum of intensity around the apex of the heart. Often it is limited to a small

space. It is propagated best in a direction from the apex anteriorly towards the median line, not so well in an opposite direction. Sometimes it is so loud as to be heard over a considerable area. These are the points involved in the discrimination of this murmur. Its presence, as I have said, denotes, with some exceptions, the existence of mitral obstructive lesions; but its absence is not proof that these lesions do not exist. It is present in only a certain proportion of the cases in which obstructive lesions exist; and it is especially apt to be present in one variety of these lesions, viz. when the mitral curtains become adherent at their sides, and form what is known as the button-hole contraction.

A regurgitant stream of blood through the mitral orifice always gives rise to a murmur unless the action of the heart be exceedingly feeble. The mitral regurgitant murmur, as we have seen, accompanies the first sound; it is one of the two systolic murmurs, the aortic direct murmur being the other. How is the mitral regurgitant to be discriminated? It has its maximum of intensity at or near the apex of the heart. It may be limited to a circumscribed space in this situation; but if not thus limited, it is propagated best and furthest in a lateral direction around the chest, towards the spine. It is often heard on the back, to the left, and not unfrequently to the right of the spinal column. It is propagated better in this direction than upwards, towards, and above the base of the heart. It is not heard over the carotids. The murmur may be more or less intense, soft, rough, or musical. We shall see presently that the points just stated with respect to the maximum of intensity, the direction of propagation, and absence from the carotids, suffice for the discrimination of this murmur. It is so constantly present when mitral regurgitation exists, that we may, in general, infer from its absence that regurgitation does not occur.

Does the mitral regurgitant murmur always denote actual regurgitation? You will say, "of course it should, from its name, have this significance." Yet it does not. We may have a mitral regurgitant murmur without regurgitation; that is, a murmur with the first sound referable to the mitral orifice may be produced when there is no insufficiency of the mitral valve. Roughening of the mitral curtains will produce it. It is therefore more accurate to call this murmur a mitral systolic murmur, with or without regurgitation. Can we determine, during life, whether the murmur be a regurgitant or non-regurgitant murmur? I think we can do this in many, if not most instances. If the murmur be limited to a circumscribed space, at or within the apex of the heart, that is, not propagated much without the heart towards the left lateral surface of the chest, and not heard on the back, it does not denote regurgitation. On the other hand, it does denote regurgitation, as a rule, if it be propagated much without the heart, and if it be heard on the back. To this rule, however, I believe there are some exceptions.

The two mitral murmurs occur separately or in combination. The mitral systolic occurs much oftener without than with the mitral direct murmur. Of the four murmurs this is the one most frequently met with in practice. The mitral direct, also, occurs alone. This is true of two of the three cases now under our observation. It then denotes obstructive lesions without regurgitation. In the remaining case both murmurs are present, denoting both obstruction and regurgitation. In this case we have a rough presystolic and soft systolic murmur at the apex, the first sound dividing the two murmurs.

To understand the diagnostic symptoms of mitral obstructive and regurgitant lesions, you must consider the effects of these lesions on the heart. Marked symptoms are not produced until the lesions have led to enlargement of the heart, and, in giving rise to enlargement, the first effect is on the left auricle. The left auricle becomes over distended and, at length, dilated from the accumulation of blood. Then ensues pulmonary congestion, next follows hypertrophy, and finally dilatation of the right ventricle, and last, the right auricle becomes dilated. The left ventricle may become but little or not at all enlarged. You see these effects on the heart finely exemplified in the specimen which I have already exhibited in this lecture, showing mitral contraction and insufficiency. The left ventricle is scarcely increased in size; the left auricle is much dilated; the right ventricle is hypertrophied and dilated so as to form a much larger portion of the organ than the left ventricle; and the right auricle is dilated. Now, as one of the symptoms of mitral lesions, involving considerable contraction or patescency, or both, we have weakness of the pulse. The pulse is weak because, in proportion to the amount of obstruction, the left ventricle is imperfectly supplied with blood, and, in proportion to the amount of regurgitation, blood is impelled backwards into the auricle which would otherwise pass into the aorta with each ventricular systole. Weakness of the pulse is thus, to some extent, a criterion of the amount of obstruction or regurgitation at the mitral orifice, especially if the action of the heart be not notably weakened, and the contrast, in some cases, between the pulse and the heart's impulse, is very striking. This contrast is strongly indicative of mitral lesions.

Obstruction to the passage of blood from the lungs to the heart, arising from the accumulation of blood in the left auricle, involves pulmonary congestion. Hence, cough and expectoration are more or less prominent symptoms. Hæmoptysis, especially if there be much mitral contraction, frequently occurs from time to time, the amount of hæmorrhage being usually small. Pulmonary apoplexy is liable to occur under these circumstances. Dyspnœa is a distressing symptom in proportion to the degree of pulmonary congestion, and when the right ventricle becomes weakened by dilatation, this becomes the source of great distress. At first, the patient only experiences want of breath on exercise, but in an advanced period of the disease the suffering may become constant and extreme.

It is rare that patients suffer much from pain in the præcordia; they complain of a sense of oppression and indefinite distress, but not of actual pain. Palpitation is not a source of much annoyance. The appetite and digestion may not be notably affected. Nutrition may be but little impaired; patients do not emaciate. The urine may contain a small quantity of albumen, indicating congestion of the kidneys, and not necessarily degenerative disease of these organs.

When dilatation of the right cavities of the heart has taken place, the veins of the neck are frequently turgid, and the surface of the body presents a cyanosed hue more or less marked. With or without turgescence of the veins of the neck, in some cases undulatory movements of these veins are observed, sometimes striking and regular, constituting a venous pulse. In some rare instances the pulsation is apparent to the touch as well as to the eye. These undulations are due to the contractions either of the right auricle or the right ventricle, or to both. It is generally easy to determine whether the jugular pulse be auricular or ventricular, or both combined. First, you satisfy yourselves that the pulsations are venous by pressing gently on the veins of the lower part of the neck, so as to interrupt the flow of blood to the heart. If the pulsations are venous they will be arrested, and return immediately the pressure is removed, the pressure being quite insufficient to arrest the flow of blood in the arteries of the neck. Having determined that the pulsations are venous, you place a finger over the carotid artery on the opposite side, and compare the visible pulse in the vein with the arterial pulse which you feel. Sometimes the pulsations in both the veins and arteries are visible. If the venous and arterial pulses are synchronous, the venous pulse is due to contraction of the right ventricle; it is a ventricular venous pulse. But if the venous pulse just precedes the arterial, as the contractions of the auricle precede those of the ventricle, it is auricular. And if for each arterial pulse there are two pulsations of the vein, one synchronous with

the arterial pulse and the other preceding it, the auricular and ventricular venous pulse are both present.

Dropsy occurs when the right cavities have become dilated. The dropsy depends on congestion of the systemic veins, arising from the obstacle to the return of blood to the heart. It commences usually in the lower extremities, and the œdema here may become very great if the patient be unable to lie down in consequence of orthopnœa. At length it extends over the body, and effusion takes place into the serous cavities.

Death takes place gradually in the great majority of cases. Instances of sudden death are not very frequent in cases of mitral valvular lesions. The usual mode of dying is by slow apnœa. Patients are liable to be destroyed by œdema of the lungs, pulmonary apoplexy, or some intercurrent affection.

The consideration of the diagnosis of aortic lesions I must leave for the commencement of my next lecture.

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from* p. 230.)

The weight of these 24 was 2¾, 3, 4, 4½, 4½, 5, 5½, 6, 6, 6½, 7, 7, 8½, 9½, 9½ oz., &c. These fifteen embrace the extremes, and show that the granular degeneration belongs alike to the large and small kidney. The small kidneys were all granular but one. Most of the large ones were in this state, yet the largest of all (weighing 12 oz.), did not show this disintegration. Intertubular granular deposit was found eight times among the twenty-four having granular cells, and twice among the six in which the cells were not granular. There is then no dependence of one of these lesions upon the other. The appearance of granules in the two positions is different, and would not suggest such a dependence. But the relations of granular cells to the increase of the fibrous tissue is a little more intimate. Thus in the twenty-four instances the kidney was decidedly fibrous in twelve; the excess of fibres was doubtful in seven, and there was clearly no excess in four only; in one not mentioned. The granular degeneration of the cells then occurred in all the decidedly fibrous kidneys, except three. At the same time that it does not depend wholly on this fibrous growth, appears from the fact that there were four at least in which there was no such increase, while the cells were granular.

There was granular matter deposited in the intertubular spaces in 10. Of these four were fibrous kidneys, three doubtful, and three were not fibrous. Eight also had granular cells, as appears above, three of which were fibrous; so that these three lesions concurred only three times. There were four kidneys among the thirty which had neither granular deposit in the intertubular tissue nor granular cells. The weight of these was 4½, 4½, 5½, and 12 oz. Thus it appears that while most of the large kidneys (as well as the small) exhibit one or other, or both these changes, the maximum size may be reached without either.

The nuclei were granular in the granular cells in about one-half, and in several of these wholly disintegrated. In the other half (16) they were either healthy or only slightly granular; and in the half of these again (8), the nuclei were separated from the granular cells. In six the granular matter was rolled into irregular cylinders in the cavities of the tubes.

Oil globules were infiltrated into the epithelial cells or tubes in considerable quantity in about one-third the cases; thus:—

Oil globules in marked excess within the cells and tubes, in	. . . .	10
" " "	in the cells of the tubular portion, only	1
"	a few not affecting the function of kidney,	12
"	none in cells or tubes (8), ...	5
"	intertubular, none in cells or tubes, . .	3
"	" in greater or less quantity, in	21
"	" and intertubular granules together, in	7

The weight of ten of the kidneys having oil in the cells and tubes was severally 4½, 4½, 4½, 5½, 7, 7½, 9, 9½, 9½, 9½ oz., three being of normal size and seven being enlarged. The weight of the five whose cells and tubes contained no oil, was in three normal, one a little less than 4 oz. and one 6 oz. This would lead us to the inference that this kind of fatty disease belongs to the large kidney, at least in a great degree; but the size of those in which the cells and tubes contained a little, and but a little oil, disturbs this inference somewhat. The weight in this latter class was respectively 2½, 3, 4, 4½, 5¾, 6, 7, 7, 7½, 8, 9½, and 12 oz, showing that while the smallest may have oil in the cells, the largest may have but little; in other words, that this kind of infiltration is not a principal agent in augmenting the organ, while it is often found in considerable quantities in the larger specimens. The excess of fibres holds about the same relation to this deposit in the cells and tubes that it does to granular disintegration of the cells. In the ten cases the kidneys were decidedly fibrous in four, excess of fibres doubtful in two, no excess in four. The two lesions concurred in a little less than half the cases in which the marked fatty disease existed.

The nuclei of the fatty cells did not, as a rule, exhibit the oily deposit. Oil globules were noticed in these bodies, however, in five instances; usually the quantity was small. The nuclei cannot always be seen, on account of the quantity of oil contained by the cells. They do not appear to be so frequently set free as those of the granular cells.

The intertubular deposit of oil, noticed in twenty-one instances, was considerable in ten, but little in eleven. The weight of the ten in which it was considerable, was severally 4½, 4½, 5½, 7, 7, 7½, 7½, 9½, 9½, and 9½ oz. This will give an average weight of $7\frac{1}{5}$ oz. It would seem then that we have at length arrived at something positive regarding the cause of the enlargement. The eleven which showed but little intertubular oil, however, had the following weights, viz:—2½, 4½, 4½, 5, 5¾, 7, 8, 8½, 9, and 12 oz., giving an average of 6¾ oz. These then lack less than half an ounce of the weight of the more fatty kidneys. But comparing these with the eight in which there was no interstitial oil, whose weights were 3, 3¾, 4, 4½, 4½, 4½, 5½, and 6 oz., averaging 4½ oz., the conviction that oily deposit is one of the agents in determining the size of the kidney chronically diseased, seems to gain confirmation. Yet in these lists is a kidney weighing 12 oz. whose intertubular tissue contained but a moderate quantity of oil, and another weighing 4½ oz. in which there was a great deal, comparatively. Still the result derived from all the cases can, I think, hardly be resisted. Granular matter in the intertubular tissue seems to have little influence on the enlargement. Among the ten instances in which it was noticed, in eight it occurred in company with oily deposits in the same tissue, and the weight in these instances was severally 4½, 4½, 4½, 5, 7½, 8, 9½, and 9½ oz., giving an average of about 6½ oz., which is one ounce less than the weight of the kidneys having considerable oil, with or without granular matter. The increase of the fibrous tissue is not intimately allied to the deposit of oil. Of the twenty-one cases twelve were fibrous, in four the excess was doubtful, and in five there was no excess; and the average weight in these classes was respectively 6 oz., 7 oz., and 5¾ oz., giving the greatest weight to those in which the matrix was abundant, but perhaps not in excess, and the least to those in which there was no excess. Then the twelve which contained the most oil, embrace seven decidedly fi-

brous, three doubtful, and two which showed no increase of the matrix; and of the nine that had but little oil, five were fibrous, two doubtful, and two normal in this respect. No valuable inference can be deduced from these figures, unless it be this—that the multiplication of fibres in a kidney does not prevent the accumulation of oil in the matrix, and probably does not materially favor it; and that the conditions which produce the oily deposit on the one hand, and the multiplication of fibres on the other, concur a little oftener than either occurs separately.

The condition of the malpighian bodies is noted in eighteen cases, and in the others I have good reason to believe that there was nothing unnatural to note, as I am confident they were examined in every instance. In a large proportion of the cases these bodies had undergone no very important change.

The capsule was thickened and contracted, and tufts shrunken in	3
Oil globules within or upon the capsule, usually quantity not large,	7
Granular matter within or upon the capsule,	5
Granular matter and oil globules together, included in the above,	2

The shrinkling of the tufts and the contraction of the capsule is undoubtedly a cardinal lesion, but the granular and fatty state, when inconsiderable, as it was in most instances, does not appear to me very important. It is interesting to notice the size of those kidneys in which contraction and shrinking occurred. It is looked for with most confidence in the contracted specimens, and is correctly regarded as almost exclusively belonging to them. Its occurrence in the large ones only shows how this, like the other lesions of Bright's disease, breaks through our arbitrary boundaries, and allies the large and small by the same *kind* of diseased action manifested in both. Their weight was severally 8½, 6½, and 2¾ oz. So, it appears that but one of the contracted kidneys had the malpighian bodies partially destroyed, while this accident occurred to two which were above the natural size. In all the fibres were very abundant. In the kidneys weighing 6½ and 2¾ oz., they were in great excess, while in that weighing 8½ oz. there was a contrast in the different parts, in some portions the fibres were in excess, in others they seemed to preserve their normal proportion. But the concurrence of this lesion with excess of fibres in the matrix is, I believe, well established. In these three cases the thickening of this capsule was much more marked than the shrinking of the tufts. In one instance the thickness was measured, and was found to vary in different parts, from $\frac{1}{10\,0\,0}$ to $\frac{2}{10\,0\,0}$ of an inch, exceeding in the average the largest diameter of a blood corpusele. The capsules in the small kidney, besides being thickened, were covered with fine oil globules on the outside, and are therefore twice counted in the figures given above. The size of the kidneys having the malpighian bodies fatty will be learned from the following weights, viz. 2¾, 4½, 4½, 5¾, 7, 7, 9 oz, and in four out of the seven cases the fibres of the matrix were increased, in the others they were abundant, but perhaps not in excess. In every instance where oil was found within or upon the capsules of the malpighian bodies it was found in about the same proportion in the fibrous matrix. Regarding the five cases in which granular matter was found upon or within these bodies, in four, similar matter was found in the matrix. In the fifth case there was a vast amount of this substance in the capsule, considerable oil in the matrix, but no granules; the epithelial cells, however, had undergone extreme granular degeneration (weight 9½ oz.). The weights of these kidneys were severally 4½, 4½, 7½, 9½, 9½ oz. The fibres were in normal quantity in three, viz. those weighing 4½, 7½, and 9½ oz. while in one weighing 4½, and one weighing 9½ oz., they were in excess. No other generalization can be deduced from these statements, than that the malpighian bodies in the greater number of these kidneys have undergone no visible change, or only such a one as should not materially affect their function; and when diseased, for the most part, their diseased state is determined by and corresponds with the condition of disease in the fibrous matrix.

An explanation of the white or whitish color, which many of the kidneys had acquired, can, I think, be obtained from the facts which I am next to submit. This pale appearance varied from a yellowish hue to an almost milk-white, and it is worthy of notice that though the form of disease is called "the *large* white kidney," it is far from being always large.

The color is noted in	29
It was cadaveric or pale yellow, or some intermediate hue in	22
Kidneys that had excess of fibres,	11
Fibres abundant, not perhaps in excess, in	5
Fibres not in excess, in	5
Fibres not mentioned, in	1

A positive and recognisable increase in the quantity of fibres occurred in just one half of the pale kidneys, and there were five in which there was no excess of the fibrous matrix, while four of the fibrous kidneys were not of this color. The excessive production of fibres, therefore, is not inconsistent with paleness, may indirectly favor its occurrence, but is not the cause of it. Before referring to what is probably its cause, I may give the weights of these pale kidneys in confirmation of the statement that they are not all large. There were between 4½ and 5½ oz., to me the unexpected large number of nine. The normal weight of the kidney I assume to be 4½ to 5 oz. So that almost one half of these specimens, more or less pale, were either of normal size, or only a little above it. Weighing from 6 to 8 oz. inclusive, there were seven; 9 and 9½ oz., four; 12 oz., one; and of one, only a part was seen by me, and the weight could not be taken. We may infer from this, that while the *large white* kidney is the type of a class, the change of color begins, and is often far advanced, before the size of the organ is materially increased. If we now examine the condition of the cells and tubes, and the intertubular tissue, we get the following results for the twenty-two pale kidneys, viz.:

Cells and tubes granular in		20
Very granular in 15, of these very fatty,		7
Moderately granular in 5, of these	Very fatty, 3 (one in spots), slightly fatty, 1—matrix exceedingly fatty; not fatty, 1—matrix decidedly granular.	
Not granular, 2; of these,	Tubes fatty 1, and matrix also fatty; cells very fatty, 1.	

All the cases in which paleness was noticed had the cells and tubes, one or both, either granular or fatty, except one, and in that the intertubular tissue was "decidedly granular." Another view of nearly the same facts will appear in the following table. Among the twenty-two pale kidneys

The cells and tubes were *fatty* in 17; fatty in spots in 1.
Very fatty in 10, and of these very granular, 6.
Slightly fatty in 7, of these very granular, 6.
Spots very fatty in 1; some tubes in this very granular.
Not fatty in 4, but: Very granular, 2; Slightly granular, 2; Matrix in both decidedly granular.

Again, the condition of the intertubular tissue is worthy of notice.

Matrix contained oil globules in 16.
Quantity considerable in 9; also decidedly granular in 5.
Quantity not great in 7; in these not granular in any.
None in 6; decidedly granular in 2; neither granular nor fatty, 4.

The four kidneys in which the matrix was neither granular nor fatty were not of large size, weighing severally 6, 6, 5½, and 4½ oz. One had the cells extremely granular, and at the same time slightly fatty; another had the cells also extremely granular but not containing oil; a third had

the cells extremely fatty without granular degeneration, and the remaining one was intensely fatty in spots, and a few of the tubes which were not fatty were opaque from granular degeneration.

As to the eight kidneys not described as pale, one was a small hobnail kidney, weighing 2¾ oz. The cells were very granular, and contained a little oil; there was also a little oil in the matrix. The color on the surface was normal, but the section was of a *light grey*. This then, without much forcing of the truth, might be called a pale kidney. *The second* was the olive-colored kidney already described, weighing 4½ oz. The matrix contained considerable oil, and considerable granular matter; but neither was found in the cells or tubes. Whatever hue this specimen might otherwise have had, was concealed by this accidental color. The *third and fourth* were of dark blood-color; both were congested, weighing 8 and 8½ oz., and after the blood had drained away both had something of the pale hue. One had granular cells and a few oil globules in the matrix; the other had a little granular matter and some oil in the matrix, and one in twenty or so of the cells contained some oil globules. *The fifth* was of a yellowish pink, weighed 4 oz. Many cells were granular, many a little fatty, and many quite normal; the matrix was healthy. *The sixth* weighed 4½ oz., and was of normal color; yet one half of the cells were more or less distended with oil, and there were some globules in the fibrous tissue. *The seventh* was another hobnail kidney, weighing 3 oz., having markedly granular cells, with a few oil globules; but the matrix contained neither granules nor oil. Its color is described as normal, with the exception of greenish (old ecchymotic) stains on the surface. *The eighth* weighed 4 oz., was of natural color, and had neither oil globule nor granule in any of its tissues; it was simply fibrous.

(To be Continued.)

REPORT ON

GANGRENE OF THE THROAT.

A DISEASE NOW FIRST OBSERVED AT THE UNITED STATES GENERAL HOSPITAL, DEPARTMENT OF THE GULF.

By DR. RUFUS KING BROWNE,

SURGEON U. S. V.

The disease I describe, is a new form of hospital gangrene—a *new* disease, if what varies so widely from ordinary hospital gangrene, but is of the same type, is entitled to be so called. I designate it Gangrene of the Throat. It was found to involve the root of the tongue, the ventricles, and the cartilage of the larynx. The cases presented no symptoms which indicated the progress of the ravage, except in one out of fourteen instances, in which, during the last half hour of life, dyspnœa was very marked. In one case, the connexion of the arytenoid and thyroid cartilages was destroyed, with the outer part of the tissues covering the side of the latter. In all the others of that number, none, except two, which presented *moderate* fœtor of the breath, presented any peculiar sign of the commencement or progress of the disease. In one or two instances of the above number, the autopsy disclosed slight œdema of the glottis, and equally slight serous infiltration of the loose tissues adjoining the larynx. None of them presented any symptoms of inflammation of the throat; neither pain, sense of distress, nor constriction. The disease did not present any of the characters of ulceration, nor assimilate any of its characteristics of heat or morbid redness. Unlike hospital gangrene, it occurs without febrile symptoms or tumefaction, or the characteristic edging of that form of ulceration.

When found after death, the destroyed part has the color of gangrened pulmonary tissue, though devoid of the very strong fœtor of the latter.

The exact character of the first stage of the disease, being not open to inspection, is undetermined. In the last of the autopsies in which it was discovered, I sought to ascertain this, but ineffectually. The œsophagus was not injured by the disease, nor did it appear on the external surface of the body. Neither did it appear in any cases of decided scorbutus, yet, in one case, it did in the alveoli of the lower jaw, which presented likewise a scorbutic appearance.

In the foregoing I describe as thoroughly as now practicable, this species of gangrene. The disease was found in eleven of the forty autopsies made by my own hands, expertly assisted by Dr. Clary, in the fifteen days ending with the 13th September. It may be a question whether the disease is not as frequent elsewhere in military hospitals, and the ordinary amount of examination in autopsies does not disclose it. Ordinarily, although the lungs, trachea, and bronchi are examined, the throat is not, except in cases where throat symptoms are manifest before death. Upon this turns the question of the frequency of gangrene of the throat. I trust this point may be decided by the concurrent search of other surgeons. It may already have been elsewhere detected. Of the cause or condition of its appearance, I am without anything but surmise. It was found in debilitated and greatly reduced patients, but of the nine hundred in this immense hospital, at the time the autopsy which first disclosed the disease was made, none were otherwise. Including these, there had been previously collected at once in its wards and spacious galleries, upwards of twelve hundred under my charge, but such of these as presented no specific ailment were sent to other quarters.

Among the number which remained, there were but four wounded who did not die. The occurrence of the disease, therefore, did not resemble the conditions of hospital gangrene. As soon as its presence was discovered by autopsy, I caused an inspection of the throats of all the patients, and isolated those suspected. Of these one died, not, however, of this disease, for his case was one of ulceration of the throat, with the ordinary symptoms of distress, circumscribed redness, and purulent formation. Other cases of ulceration were radically improved by topical treatment with sol. argenti nitratis.

In one instance only did such inspection of the throat reveal gangrene. Here it had invaded the space between the pillars of the fauces. It was treated vigorously with a strong solution of nitrate of silver. The only complaint this patient made was, that his mouth was sore. He died. In the most recent autopsies the disease does not appear.

I describe this disease so soon after my experience of it, in the earnest desire that others may guard against its being overlooked. I know but little respecting it; I have simply observed—

First. That it appeared among the sick and debilitated patients, not wounded, nearly all of whom had been reduced by that most *deadening* of all diseases, the Mississippi or marsh fever. Many of these had long been afflicted with chronic and incurable diarrhœa. They were weak and feeble. Precisely similar were some of these cases in the manner of their disease and death, to those named by your correspondent, Dr. Rawson. Perhaps, however, otherwise than Dr. Rawson thinks, debility, and not scurvy, is the cause of death in these cases, for many undoubtedly scorbutic and debilitated recuperate, while others debilitated and not obviously scorbutic, die. They would rise, walk feebly but steadily along, return to bed, and immediately die. The autopsy revealed no lesion or organic disease. In vain I searched brain, heart, lungs, and the other organs, for some of the familiar causes of sudden death. I spent in the search every moment of spare time. In but four cases did I discover any of these causes. It was in the midst of this ineffectual search for its special purpose that I at length noticed, issuing from the mouth of a dying man, a little foul-looking and slimy fluid, of a peculiar cadaverous odor. He had never complained, so far as the attending physician was aware, of any throat difficulty, but, on autopsy, I explored the throat and found the disease I describe.

Secondly. So far as I have discovered, this disease attacks the throat and no other organ. It has appeared only in

the mucous membrane. I sought, but failed in every instance, to find it in the same case with gangrene of the lung. Nor have I found it in the same case with scorbutus or the ordinary hospital gangrene.

Thirdly. Not a single one of the conditions known as productive of hospital gangrene, existed during its production here. The wards of the hospital are very lofty, and its spacious and equally lofty galleries and corridors will entertain in the most salutary manner twenty-five hundred patients, but at no time was there more than twelve hundred and fifty. There is no part of these secluded from a free sweep of fresh air. The windows reach almost from the high ceiling nearly to the floor.

The outer wall of the edifice is of iron, the inner of brick, thoroughly whitewashed.

With regard to cleanliness, the force of energy and attention could no further go, as I imagine. From the first moment when I voluntarily took charge of the twelve hundred sick deposited here from Baton Rouge, the collected sick of a whole season of the troops there, and Vicksburg swamps, no unpleasant odor has been allowed to be present anywhere within the walls, even in the kitchen. With a large force of contrabands to do it, every sunrise sees every washable part of the building cleansed thoroughly; not a spot but is visited by me *several* times a day.

Aware of the magnitude of the dangers of uncleanliness among so large a number of sick men in one building, the inflexible rule has been, punishment of every offence of the least uncleanliness, alike of officers or privates. Had this rule not been enforced with a constancy and force of determination neither to be baulked nor evaded, these walls would have been a pest-house. To be sure, these men were deposited here destitute *of everything whatever* but accumulated filth and disease, *and as completely lost to any notion of, or respect for, cleanliness, as though they had never heard of it,* but since they have been here, no uncleanliness of the hospital has been *permitted.* Even the outer walls, being of painted iron, and reachable to the galleries, have been continually scrubbed. Patients in wards in which the mortality was greatest, which had been floored for us, were placed in others as soon as floored, while all the wards except two are open on both sides to the open air. Finally, except the scorbutic condition of the system, there have been here none of the known conditions of hospital gangrene. The existence of "gangrene of the throat" is to be accounted for on other conditions—perhaps the mere absence of vigor, and of the enlivening power of the blood.

On a continued examination of this disease, I am constantly convinced that if it has been noticed in single instances, it has not been known to exist in any considerable number of cases—I ascertained eleven cases out of forty-two autopsies. A larger number of autopsies, amounting to eighty-seven, was made without any suspicion of the disease. As often as the disease was disclosed, I thought of one point—its painless progress—of similarity with phagedenic ulcer of the penis, and looked for this in its appropriate seat, but invariably without success. The whole number of these cases were examined with reference to disease of the principal organs, causing death, but the general debility or cachexia was thought to be sufficient to account for them. Otherwise, therefore, than as either Dr. Rawson or Dr. Kennedy supposes, debility was neither a "symptom" (Rawson), nor a "cause" (Kennedy), of scurvy; for although they were examined most carefully, even to the opening of the joints, none of the symptoms which constitute scurvy, according to our knowledge, were found. For they do not die of scurvy but of debility. But one case died of scurvy, and autopsy disclosed the disease in various signs.

In all these instances the abdominal cavity contains a large quantity of fluid, which floods the intestinal tube and augments its morbid activity. Autopsies made but a few minutes after death *always* disclose this fact. In such cases the supposition was always entertained, that the vascular portion of the omentum was the source of the accumulation. Here also the watery part of the dilute blood, in a very dependent part, transudes through the thin coats of the capillaries, and collects into the abdominal cavity—and concurrently to this the feeble force of the circulation scarcely suffices to dispel the blood past the point of gravitation.

The same is true of the œdema of the legs, or of the chest. Always I find by autopsy such is the case. This excess of fluid in the cavities tends further to slacken the forces of life, and bring them to an end The sum total of the fluid of the body is *not* decreased; but the blood itself *is*,—hence you will always find on autopsy of these cases but little *blood* (it is surprising how little), and that principally in the veins of the neck—the portal and pulmonary system, and even the great arterial vessels have but little. These debilitated men die so suddenly, that but for their previous state, and the entire absence of the conditions of congestion, you would think them stricken of apoplexy. It is simply the end of debility. The kidneys have secreted their normal amount of fluid—and are found healthy and of full size. It is of but little use, therefore, to give directions, unless you revive the functions which replenish the blood, and form its plastic elements. The skin also does its part, but ineffectually. I have made some rapid reductions of the œdema of the lower extremities by means of a mixture of aqua distil. 1 qt., rock salt ℥ ij., and glauber salt 3j., and have also observed a marked improvement in the general anasarca from the juice of the raw onion, though the quantity of this latter I could cause to be made was very small, having nothing better for the purpose than an extemporized lemon squeezer. For the scorbutic tendency a cold potato salad, formed of boiled sliced potato, onions, vinegar, and a little olive-oil, is the best *alleviant,* or finely sliced raw potato may be used—though I suppose the juice of the raw potato to be the very best; and for arrow-root in cases of weakness of the stomach, I substitute a mess made of lager-beer thickened with good flour, or the mucilage of slippery elm, flavored, and set upon the stove until it reaches ebullition. This mess is tonic, and the gluten of the flour is the most nearly assimilable of all vegetable proximate principles; and is very nutritive, while it is not less emollient than arrow-root.

As stated above, there is a large proportion of the sick, of cases of chronic diarrhœa, which have had intermittent fever, that are incurable by any of the known resources of therapeutics. Again and again, in the history of these, the frequency of the fæcal discharges may be abated or arrested, but the cessation will be only temporary. The system itself reaches a stage of debility, where it does not respond to the presence in it of the appropriate remedy. For precisely as a certain organ is requisite to deal out and appropriate nourishing substances, so is it requisite to deal with a remedy. Not only is the blood itself not *renovated,* nor its dominant element, the red globules, formed, but for the very reason that this replenishment does not occur, it becomes thinner, diminished in amount, and dilute from the continued absorption of the watery parts of the serous fluid bathing the tissues. In those parts of the vascular system, therefore, as mucous surfaces, where the normal function of the capillaries in co-operation with the follicles based upon them, is to secrete some of the proximate substances, they transude a watery fluid alone. The muscular fibrillæ everywhere, the dominant cause of the various functions, unsupplied with their proper substance from the blood, become toneless and lax,—and the intestinal canal becomes a mere receiver of a watery transudation.

But what was most remarkable was, that the autopsy disclosed in all but three of these cases a *striking flabbiness of the heart, proving that* what has been said of the muscular fibrillæ is equally true of the heart, and the muscular part of the entire arterial system. This debilitated heart, therefore, greatly impaired in power, combined with a small quantity of blood,—a want of propelling power, and

propelled fluid—a *two-fold* inefficiency of the circulation—is precisely the condition for the transudation of fluid formed in such cases. It accounts, indeed, both for the almost total want of energy, and explains the character of the disease.

This condition of the impoverished and diminishing, relaxed, and flabby muscular substance, perfectly accounts for the patient's *feeling* so very sensibly his inefficiency to move by means of the voluntary system, and the reflective will easily distinguish between this "*feeling*" and the *consciousness* or knowledge a patient experiences in paraplegia, wherein there is no such impoverishment of the muscles, unless the immobility is chronic. I do not see that reason demands any more explicit explanation of the facts in the case. You may think a patient merely spiritless and lazy, you may exhort him accordingly; but on a careful inspection of his acts day by day, you will find he can do no better *as he is*. The only partial recuperative is a Northern climate.

In the absence of an invigorating climate, no restoration of these cases is possible by medicine. The red globules of the blood, always the enlivening agents of the functions, being wanting, as the normal quality of the blood as a plastic material, the gastric juice cannot be secreted, and also the physiological dissolution of food is unperformed. Every food, therefore, which requires such dissolution, is passed without it.

I have continued to attempt the restoration of these cases, by an adequate supply of the cold extract of beef (Liebig) which contains all the soluble organic substance of flesh—and the hematine of its red substance, in the most assimilable form. But no obvious success has been attained. This substance is greatly the superior of beef essence or beef tea. Even under this care these cases linger on, and one by one drop off.

It is thus the *Northern* soldier, to whom the environment of a northern atmosphere is *literally a part of his being*, yields his life in defence of liberty.

People do not "stand" upon their muscle here, *they sit and lounge*. Find a man anywhere, and if there is a resting-place of only the dry ground he is "*down upon it*." Soldiers do not carry their knapsacks, the quartermaster does it. Nor do they stand guard with their muskets. They sit guard in shirt sleeves and detached bayonet.

These are the conditions, it appears to me, which hold a direct relation to gangrene of the throat—a non-inflammatory—a non-febrile, destructive disease.

Progress of Medical Science.

NEW EXCRETORY FUNCTIONS OF THE LIVER.

Dr. Austin Flint, Jr., has furnished to the *American Journal of Medical Sciences*, Oct., 1862, a very elaborate paper upon the new excretory function of the liver. As the result of many careful experiments with reference to this point, the following conclusions are arrived at:

1. The cholesterine exists in the bile, the blood, the nervous matter, the crystalline lens and the meconium; but is not found in the fæces in ordinary conditions. The quantity of cholesterine in the blood of the arm is from five to eight times more than the ordinary estimate. 2. Cholesterine is formed in great part, if not entirely, in the substance of this nervous matter, where it exists in great abundance; from which it is taken up by the blood, and constitutes one of the most important of the effete or excrementitious products of the body. Its formation is constant; is always existing in the nervous matter and circulating fluid. 3. Cholesterine is separated from the blood by the liver, appears as a constant element of the bile, and is discharged into the alimentary canal. The history of this substance in the circulating fluid and in the bile, marks it as a product destined to be got rid of by the system, or an excretion. It pre-exists in the blood, subserves no useful purpose in the economy; is separated by the liver, and not manufactured there; and if this separation be interfered with, accumulates in the system, producing blood-poisoning. 4. The bile has two separate and distinct functions dependent on the presence of two elements of an entirely different character. It has a function connected with nutrition. This is dependent on the presence of the glyco-cholate and tauro-cholate of soda, which do not pre-exist in the blood, subserve a useful purpose in the economy, and are not discharged from it, are manufactured in the liver and peculiar to the bile, do not accumulate in the blood when the function of the liver is interfered with, and are, in short, products of *secretion*. But it has another function connected with depuration which is dependent on the presence of cholesterine which is an excretion: the flow of the bile is remittent, being much increased during the digestive act, but produced during the intervals of digestion for the purpose of separating the cholesterine from the blood, which is constantly receiving it. 5. The ordinary normal fæces do not contain cholesterine, but contains *stercorine* (formerly called seroline from its being supposed to exist only in the serum of the blood) produced by a transformation of the cholesterine of the bile during the digestive act. 6. The change of cholesterine into stercorine does not take place when digestion is arrested, or before this process commences; consequently stercorine is not found in the meconium or in the fæces of hybernating animals during their torpid condition. These matters contain cholesterine in large abundance, which also sometimes appears in the fæces of animals after a long fast. Stercorine is the form in which cholesterine is discharged from the body. 7. The difference between the two varieties of jaundice with which we are familiar, are characterized only by yellowness of skin and are comparatively innocuous, while the other is attended with very grave symptoms, and is almost invariably fatal, and is dependent upon the obstruction of the bile in the one case, and its suppression in the other. In the first instance, the bile is confined in the excretory passages, and its coloring matter is absorbed, while in the other the cholesterine is retained in the blood and acts as a poison. 8. There is a condition of the blood dependent upon the accumulation of cholesterine, which Dr. Flint has called *Cholesteremia*. This only occurs when there is a structural change in the liver, which incapacitates it from performing its excretory functions. It is characterized by symptoms of a grave character, referable to the brain, and dependent upon the poisonous effects of the retained cholesterine on this organ. It occurs with or without jaundice. 9. Cholesteremia does not occur in every instance of structural disease of the liver. Enough of the liver must be destroyed to prevent the due elimination of the cholesterine. In cases in which the organ is but moderately affected the sound portion is capable of performing the eliminative function of the whole. 10. In cases of simple jaundice, when the fæces are decolorized and the bile is entirely shut off from the intestine, stercorine is not formed in the evacuations; but in cases of jaundice with cholesteremia, the stercorine may be found, though always very much diminished in quantity, showing that there is an insufficiency in the separation of the cholesterine from the blood, though its secretion is not easily suspended. After death in these cases, but a small quantity of bile is found in the gall-bladder.

Government, it is understood, is to rent the hospital grounds at New Haven, Ct., and erect buildings to accommodate one thousand patients. The hospital will be organized on a strictly military basis. Dr. P. A. Jewett has been appointed a surgeon in the United States Army, and the hospital will be under his charge, with a sufficient number of assistant surgeons. Two hundred and fifty wounded soldiers are expected to arrive in New Haven in a few days.—*Courant.*

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

STATED MEETING, April 16, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION ON PELVIC HÆMATOCELE.

Abstract from Dr. Byrne's paper, continued from page 232.

CURATIVE TREATMENT.—Formerly Nélaton and others resorted to puncture in these cases indiscriminately, but inasmuch as several cases so treated terminated fatally, some by purulent infiltration, and others by loss of blood, the expectant treatment has, for the most part, been recommended by writers. Nélaton suggests, "*if opened at all, a free incision to prevent decomposition,*" but thinks, at the same time, "*you can always rely on absorption.*"

It will be found hard to reconcile such an opinion with the impressions likely to be derived from a perusal of recorded cases; nor does it seem safe or possible to base any satisfactory speculation on such limited data as the statistics of hæmatocele yet afford; because, in several instances where "puncture of the tumor was followed by fatal consequences," the unwarrantable delay in resorting to this means of relief, and not the operation itself, was in a great measure the cause of such a result. Again: among the cases treated successfully on the expectant plan, we find many ending by "spontaneous evacuation of the cyst," as well as by absorption, though by right those which terminate in the latter manner only should be included in such list. Because, therefore, a cyst *may, in time*, burst, and discharge its contents through the vagina or rectum, or the tumor be removed by absorption, the medical attendant would surely not feel justified in delaying the necessary operation, and thereby causing the patient so much suffering and risk.

Moreover, if fatal consequences have occasionally followed the opening of the cyst, it should not be forgotten that the manner in which this was resorted to, or the questionable proceeding of injecting the cavity afterwards, may have had something to do with the issue. Besides, when we know that "surgical interference," too long delayed, may be worse than useless, and that even the cyst may empty its contents through the softened tissues into the peritonæum,* "*I would submit, that we have no right thus to test the patient's powers of endurance; and I venture to predict, that further experience, if not the dictates of conscience and humanity, will lead us to discard such practice.*"

After the inflammatory complications which follow the invasion of hæmatocele have passed over, and especially if the condition of the patient, or the size and location of the tumor, be such as would lead us to hope for absorption, such constitutional and topical means as seem best calculated to promote that process, should always be first resorted to. For this purpose, counter-irritation over the seat of the tumor, the internal and local use of iodine, mercury, and other alteratives, perfect rest in the horizontal position, and strict attention to the state of the bowels, would appear to be the principal means likely to advance this end.

PUNCTURE.—Recamier, a strong advocate for opening the cyst, when such proceeding seemed at all practicable, was accustomed, after making an incision into the posterior vaginal wall, to introduce one or two fingers into the wound, for the purpose of removing any clots which might be found adhering to its walls; and Professor Simpson has practised and recommended a similar proceeding, while French surgeons generally resort to puncture with a trocar, and almost all writers thus far practise or commend the use of tepid water, or medicated injections, into the cavity, "for the purpose of preventing decomposition," or "purulent infiltration."

With regard to the best place to select for opening these cysts, the author makes the following remarks:—"In the case referred to, it will also have been noticed that the *rectum* and not the vagina was chosen as the more suitable place to puncture, because (1st) the posterior wall was thinner and more dependent; (2d), there seemed to be less danger of wounding branches of the hæmorrhoidal or other arteries—no pulsations having been noticed on this surface of the tumor; (3d, the discharge, if long continued, would be less disagreeable to the patient; and (4th), when spontaneous evacuation of the cyst takes place, it occurs more frequently, and with no less favorable results in this locality than in the vagina. *Similar motives, I imagine, ought to influence our judgment in almost all cases of retro-uterine hæmatocele, and, therefore, I would suggest that the rectum would be found the more convenient and safe space through which to penetrate these tumors.*"

The instrument recommended is a large sized trocar, "*such as is used for tapping ovarian cysts,*" and, as injecting these cysts cannot be considered beneficial, or, in all cases, safe, the canula may, generally, be removed, when the fluid ceases to flow through that tube. Puncture may be repeated many times, if necessary.

* The cases collected by M. Voison offer more than one melancholy example of this unjustifiable delay in resorting to the only rational means of relief, namely—PUNCTURE.

American Medical Times.

SATURDAY, NOVEMBER 1, 1862.

THE WOUNDED AND THE AMBULANCES OF OUR ARMY.

RECENT battles have given a percentage of killed and wounded fully equal to that of the great battle-fields of Europe. The terrible slaughter upon the Antietam even exceeded that of Waterloo; while the fields of Shiloh, Manassas, and the Chickahominy, have exceeded the rate of destruction at Solferino and Magenta. On the memorable seventeenth of September, at the Antietam, more than one-sixth of the total Union force actually engaged, was placed *hors du combat*, and like fate befell a still greater proportion of the rebel troops. But we will not multiply figures to impress the fact that the War for the Union, with all its delays, is really an earnest and sanguinary struggle. Every hamlet, and almost every family, both at the North and the South, mournfully testifies to the fact, that our brave volunteers have fought like veterans.

From every battle-field has come the report—doubly confirmed by medical officers and exhausted sufferers from wounds—of gross mismanagement and inefficiency of the Ambulance service, the lack of system and control of the ambulance force during battle; the inattention and brutality of the ambulance wagon-drivers, and the needless sufferings of wounded men subjected to the perilous consequences of the existing system, or rather the want of system in the ambulance service. The public ear is continually pained, and the popular heart lacerated by the narratives of individual suffering from the needless but inevitable neglect and brutality of the ambulance system of our army. We read in every village paper, such obituary notices as the following:

Died at one of the Hospitals near Washington, Sept. ——, John A. Noble, a youthful member of Duryea's Zouaves (Fifth N. Y. Vols.), who was severely wounded at the battle of Bull Run; and having lain upon the field without surgical aid for five days, died from exhaustion and exposure.—*Richmond Co. Gazette.*

In the name of humanity we ask why this heroic Zouave and hundreds of his companions in arms were left thus to suffer the anguish of wounds and the torture of hunger and thirst five days in their gore upon the battle-field? The fact that the enemy ultimately held the field, affords no apology for such an event. Experience has repeatedly shown that it is practicable, by means of a well disciplined ambulance corps, to withdraw from the columns and immediately succor those who fall in martial conflicts. It is known that our enemy, though so often worsted or driven before the Union forces, has seldom left his wounded upon the field. Even in the great conflict upon the Antietam, where the enemy was steadily driven from his positions, his wounded were quickly and nearly all removed to his rear in the vicinity of the Potomac. Though nearly two thousand of those wounded ultimately fell into the hands of our army, only about five hundred of them had not been thus rescued by the humble *Corps d'Ambulance* of their own army. The organization of that corps we will notice hereafter. But it is not alone of the want of an ambulance corps on the field that we complain. In mercy's name, we protest against the barbarous and disorderly management of the ambulance trains, the brutal conduct of the wagon-drivers, and the unfitnesss of the existing system of field and general transportation of our wounded.

Though we are happy to know that upon the great field of Antietam there was better management of the ambulance corps than at Manassas, still it was found impossible by the Chief Director, Dr. Letterman, and his subordinate Directors of Division, to give anything like satisfactory efficiency to the work of removal and immediate provisional care of the wounded. And then it was found that the medical and hospital supplies were detained at a depôt twenty-five miles distant, and no power of the Medical Department could procure or expedite their transportation to the field. Twenty-four hours after the battle the entire cargo of those supplies, amounting to fifty tons, was still unmoved, though requisition after requisition had vainly been made for their transportation, and a thousand army wagons were then loading with ordinary forage and commissary stores.

Without presuming to propose any scheme of our own for remedying these evils, facts justify us in concluding that the following circumstances seriously embarrass, and often foil the best efforts of medical officers in their plans for the care of wounded men on the field:—

1. The men ordinarily detailed to serve as an ambulance corps on the field, or to attend the ambulance trains, are seldom selected for their fitness, and they are untrained to the duties required.

2. The Medical Department is entirely dependent upon the Quartermaster of Transportation for all its transportation of supplies, not being allowed so much as an humble mule-train to bring forward its most urgent requisitions, if forage and other supplies are demanding transportation.

3. The *Military Orders* which have been promulgated respecting the ambulance service have been studiously neglected by the very authorities that issued them.

While we would urge the Medical Department to mature and present to Congress on its assembling, a proper plan for reforming this department of service, we implore our brethren in the field not to neglect any available measures for immediately improving this service, and providing for the exigencies of the present campaign. To this end it will doubtless be found practicable to procure the general observance of the leading provisions of the Order promulgated by Gen. McClellan the 2d of August last. [*General Order No.* 147, *Army of the Potomac.*] And in every Division of our army it certainly will be possible to adopt the simple plan that has been long in operation in the army of the enemy, which we are informed is this:—From each Regiment, Brigade, or Division, a given number of suitable men are selected and detailed to constitute a permanent Ambulance or Field Hospital Corps. When installed in this service and approved by the medical officers, they remain non-combatants, under special training, and ever ready for their assigned service with the columns in battles, with the ambulances, and in the temporary hospitals. In the latter situation these men are faithful to their duty, and our own surgeons can testify to their usefulness, and to the excellent results of their training.

By any means that may be available let the brave men who fall in battle be rescued and sent to the rear the hour they are wounded, and let every surgeon assume the responsibility of reporting and returning every vicious and unfit man who is detailed to the corps as an attendant or wagon driver, otherwise the brutal conduct that has been so faithfully described by Dr. Bowditch in his "Trip to Chantilly" will be continually repeated. And, as a temporary expedient everywhere available against the risk of delay in supplies of the requisite medical and surgical appliances in battles, why should not corps or division Directors immediately provide themselves with a suitable outfit of pack-mules loaded with such supplies, as has already been ingeniously done by the Medical Director of the 12th *corps d'armée?* Let some effectual measures be adopted by each Director to prevent deficiency or delay of supplies at the hour when the skill and appliances of our art are most available to the wounded.

THE WEEK.

At the last meeting of the Academy of Medicine notice was given of a motion to amend the Constitution. The alteration proposed was to strike out Section 3 of Art. V., which reads, "*No Fellow shall be eligible to the office of President for two successive terms.*" We are glad to see this proposed amendment, and hope it will be adopted. As the Constitution now stands it is arbitrary and unjust, debarring one member, and one only, from an equal privilege with the rest, when that member may be the best qualified for the office from which he is excluded. It is also an injustice to the Academy itself, as this body is forbidden electing to its principal office a member who may have proved himself by his services preeminently fitted for the position. It is no unjust reflection upon the individual members of this or any other scientific association to allege that a good presiding officer is rarely found in such bodies. It is but the part of wisdom, therefore, to allow the utmost latitude in the selection of this officer. Especially does it seem important that at any time a tried and acceptable President, about to close his official term, should be retained at the pleasure of the Academy, rather than that it should be compelled by an arbitrary rule to elect an untried successor. The Academy may, in this matter, well imitate the Historical Society, over which has presided during so many successive years with dignity, impartiality, and efficiency, its present honored President.

A RECENT article in the London *Psychycological Journal* conveyed the impression that Dr. I. PARIOOT, the eminent advocate of the free-air system of treating the insane, had abandoned that idea. In the last number of the *American Journal of Insanity*, Dr. PARIGOT denies positively this statement, and adds that it is yet to be the system of treatment in both hemispheres. Every one interested in the treatment of the insane will read the letter of PROFESSOR LEE (on another page of this paper) on the Colony of Fitz-James with great satisfaction. We trust the time is not distant when this most rational, humane, and Christian system will be fully adopted in this country.

—

THE "Central Park Hospital" of this city is about to be opened for the reception of patients. It will be in charge of Dr. F. H. HAMILTON, and will be devoted to soldiers who have suffered amputation, and who are to be supplied with artificial limbs by Government. We learn also that Dr. E. D. HUDSON, the manufacturer of what is known as "Palmer's Leg," has been appointed to furnish and adjust this limb to the soldiers entitled to this gratuity in the vicinity of New York. It is truly gratifying to have the merits of a qualified medical man, devoted to mechanical surgery, recognised by the highest authority, and so generously patronized.

—

THE *Pacific Medical and Surgical Journal* has passed into the hands of V. J. FOURGEAUD, M.D., of San Francisco, Cal. Dr. F. is very well known to the profession by his monograph on diphtheria. This Journal has frequently changed its Editorial management within the last year or two, but it has continued its regular issues. We hope its pecuniary success will prove satisfactory to its proprietors and insure its permanency.

—

IN the Editorial article of the last number, two errors occur which need correction. At the close of the first paragraph, the word "*church*" should read "*bench*." In the next paragraph, the sentence—"And no physician of an Asylum can rely on legal affidavits, when he admits a patient into a lunatic ward," Should read—"and no physician of an Asylum can dispense with legal affidavits," etc.

Correspondence.

THE NEW USE FOR TOBACCO.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—In the communication in a recent issue, under the signature of CYONET, I find some remarks upon the subject of tobacco which invite comment. M. Demeaux, a physician of reliability, thinks he has discovered a new use for this drug, and with the true spirit of a philanthropist promulgates his views to the world. But for this he is ridiculed by his brother savans, who only show their prejudices against the employment of the weed by the short-sighted objections which they raise against it. Now, if M. Demeaux be not mistaken in regard to the antiphrodisiac properties of tobacco, a great amount of good can be done to the countless victims of masturbation. And pray, why are not his observations entitled to respect? Why should the door be closed against all further discussion and investigation into this subject, simply because Rayer, Flourens, Velpeau, or Dumas hold to different opinions. The most amusing argument against Demeaux's belief is that offered by Dumas. He says: "Why attribute the improvement in humanity to tobacco, rather than to sugar, meats, or wines, the consumption of which has augmented quite as largely as that of tobacco?" We would ask, what analogy do any of these articles, in their effects, bear to tobacco? It is too well known that tobacco acts almost wholly upon the nervous system, and that, in those accustomed to its moderate use, the first effect is decidedly sedative. Now, none of the other articles, except wine, have any direct action upon the nervous system, and that is generally conceded to be a stimulant to venery. Theory would seem to bear out Demeaux's statement. Those of an excitable nervous system, and who are most generally addicted to masturbation, require something to properly balance their nervous forces, and we have a right to expect that tobacco has, in its soothing, sedative, and stimulating effect, a tendency to do this. One vice, it is true, will be substituted for another, but which one is the greatest? We see it advised that one preventive against masturbation is a constant occupation of the mind. Our schoolboys and students must have some leisure time, which must be occupied in some way or another. Smoking is a habit which most desire to enjoy, and in order to get the full benefits of its effects they are content for the time being to do nothing else. The vacuum which craves for some sort of gratification of appetite is thus filled to satisfaction. I wish not to be understood as advocating the indiscriminate use of tobacco, because all of our young men are not addicted to onanism; but I am in favor, on theoretical grounds, of inviting on behalf of M. Demeaux, a fair trial of it in the cases for which he recommends it. It would be an interesting fact to establish in reference to this question, whether masturbation prevails less than formerly among the females—if so, it would certainly be an argument against the use of tobacco as a remedy. CYONET, alluding to the fact that Demeaux's views have been treated with significant apathy by his colleagues, says: "I should array my pen against such insult, did M. Demeaux only explain *how* the smoking of tobacco cures onanism. He describes a remedy, tells the benign result, but makes no allusion to the *modus operandi* whereby the result arrives." Now, I would ask if CYONET, in his practice, only prescribes those remedies whose method of action he can explain. If so, the domain of his therapeutics must be as cramped as his logic. Take for example, opium—does CYONET doubt the effect of a dose of this drug—but will he attempt to explain to the satisfaction of all, why the narcotic effect is produced? The suggestion of M. Demeaux, in my opinion, is entitled to respect, if for no other reason than that he has shown a disposition to investigate a question in therapeutics, which, so far as I know to the contrary, is an entirely new one. He has commenced his investigation in a truly legitimate way by a study of statistics, and we have no right to deny the truth of his statements until we have looked into the matter a little more fully. The science of medicine is a progressive one, improvements must necessarily be made in every department, and who can now pretend to say that tobacco may not be almost as effectual a remedy for masturbation, as chloroform has proved itself to be for pain, quinine for ague, or mercury for syphilis. It strikes me that this is a subject worthy of the investigation of our army surgeons.

Yours, etc.
RECTUS.

New York, Sept 28, 1862.

JUBILATION IN THE LAUNDRY.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—Some time ago you noticed several recent valuable improvements in matters of household labor. You also alluded to others designed to promote indoor as well as outdoor exercise, especially of young females, who, by the conventionalities of society, are excluded from many of those health-inspiring games which the other sex so freely partake of, to their decided advantage both in youth and age. It is evident to every observant practitioner that there is a vast discrepancy between the sons and daughters

among his patients, in their strength of muscle, their firmness of nerve, and the peculiarities of their bodily and mental disorders—a discrepancy which is exaggerated beyond all necessity, except from the cause above mentioned, at least up to the period of womanhood and childbearing; and we cannot doubt that even the trials of maternity are made more severe and less endurable by the very faulty physical education of early life. It is said that "necessity is the mother of invention," and it may be on this principle that human ingenuity has of late been busy with efforts to loosen the bonds which society has thrown around the physical development of our feminines, and by the parlor skates and other similar improvements entice them to what nature impels but fashion forbids—*exercise*.

But, as true physicians, our concern is not alone with the occupants of the drawing-room, but the more humble and laborious denizens of the kitchen and laundry are entitled to our professional consideration, especially in whatever relates to the prevention of sickness, of which they are the least able to endure either the physical or the pecuniary burdens. There is no need to provide them with incentives to exercise; but there is necessity to alleviate the pressure of their daily toil. It is therefore with no little gratification that we advert to the improvements recently made in the facilities for that most disagreeable and laborious, yet most essential to personal health, of all household duties—*clothes washing*.

Although we are yet unprovided with an invention fully capable of entirely relieving severe hand-labor in this branch of household work, yet we have noticed several different aims to this purpose which afford the hope of a more complete success ere long. With one or two exceptions, all the hand washing-machines have one principle of action, viz. imitation of the knuckle-rubbing operation; the fault of all appears to be their inability to cleanse thoroughly very dirty clothing.

He would confer a great blessing upon all laundry maids, who would give them an apparatus to enable them to avoid their now severe bodily exertions, keep their hands out of the hot soapsuds, and the hot soapsuds out of their lungs, at the same time thoroughly purifying the household linen and wearing apparel.

A jubilation in the laundry has, however, been produced by the introduction into that department of an instrument for the relief of its inmates from the severe drudgery and exhausting labor required in wringing the clothes. It is now possible for a washwoman of a slender frame and weak arms and chest, to accomplish her task with comparative ease. Wringing of the clothes, after washing them, is the severest and most exhausting service required of her, but of this she is now entirely relieved. The portion of the task which may have required two hours can now be performed in fifteen minutes. And this may be done with no more expenditure of muscle than grinding coffee for breakfast, and without the least fear of injury to the fabric of the clothing. G.

INFANTS WITH TEETH AT BIRTH.

[To the Editor of the American Medical Times.]

Sir:—In the lying-in wards of Bellevue there are now two infants under my care who were born with teeth, viz. William Hoffman, sixth child, weight at birth six and one-half pounds, puny, fully developed; right middle incisor in lower jaw well formed and protruded, but placed athwart the jaw.

Annie Morse, first child, weighed at birth seven pounds, fully developed; two middle incisors in the lower jaw, both well formed, but loose; right incisor set obliquely in the alveolar process.

Yours, etc.,
Geo. T. Elliot, Jr.,
Physician to Bellevue Hospital.

18 West 29th St., Oct. 20, 1862.

FOREIGN CORRESPONDENCE.

LETTER XV.

By Prof. Charles A. Lee.

COLONY OF FITZ-JAMES.

Clermont, Department of Oise, France, August 21, 1862.

This beautiful village is situated some fifty miles north of Paris, in the Department of Oise, in one of the finest and most productive agricultural regions of France. It is now in the midst of the wheat harvest, and more than one half of the whole territory between this and Paris is covered by one of the heaviest crops of this cereal ever known in the kingdom. It is also a very fruitful wine-growing region, some of the finest champagne being produced in this vicinity.

My object in visiting this place has been to examine the private insane asylum of the brothers Labitte, and the famous "Colony of Fitz-James" connected with it. The private asylum was founded some thirty years ago, by the father of the present proprietors, but the "Colony" dates only from the year 1847. As it is the only institution of the kind in France, and established, as it seems to me, on a correct principle, namely, that employment, and especially *agricultural labor*, is not only one of the most successful modes of treatment of the insane, but also the most advantageous in an economical point of view, I trust that some account of the establishment may prove acceptable to your readers. In the year above named, the institution was organized by one of the brothers taking the general charge or superintendence; another took charge of the agricultural department; a third of the medical treatment of the males; while Dr. Woillez attended to the medical management of the females. This arrangement continued until 1850, when Dr. Gustavus Labitte assumed the entire management, aided by Dr. Pain, an adjunct physician, two internes, or house-physicians, and an apothecary. At first, about ninety acres of land were cultivated in the immediate neighborhood of the asylum, on the border of the village. They soon, however, perceived that it would be more advantageous to have the farm at a greater distance from the asylum, so that the laboring class of patients would have no intercourse with the others, and their employment be better regulated.

To carry out this plan another large farm, of nearly five hundred acres, was purchased, about three-quarters of a mile from the village, but adjoining that already under cultivation; pleasantly located, perfectly healthy, and easy of access. To this farm forty strong and quiet male patients were removed, and this may be said to have been the commencement of the colony. The results of this experiment far exceeded the expectations of the proprietors, and very soon other buildings were found necessary to accommodate the increasing number of inmates. Improvements and additions have from time to time been made, till now a most complete and extensive establishment has been created, the entire means having been derived from the profits of the system of organized labor. For the last four years, during which the system has been fully and completely carried out, the most remarkable success has been witnessed; in all curable cases the most prompt amelioration has been observed; those who appeared indocile, untractable, and unable to perform any serviceable labor, have been found perfectly manageable and docile, and their mental restoration kept pace with the improvement in their bodily health, proving that agricultural labor is the true Hygeian fount. Male patients are transferred from the asylum to the colony, according to their condition, and if necessary, they are retransferred to the asylum, an event which rarely happens. This employment in the open air, in such kind of agricultural labor as seems best suited to the general strength and adaptation of the patient, *solves at last the restraint* or *non-restraint problem*, and shows conclusively that if there is a proper channel in which muscular and nervous energy may be exerted (and this is found to be the true one), it will not break out into anomalous, irregular, and violent manifestations. This is the channel originally

opened by Omnipotent Wisdom for the disordered race of fallen man. The idea of constraint and confinement does not even enter the mind of these apparently happy and contented laborers. They mingle freely in each other's society, they enjoy the largest liberty, they talk, laugh, joke, in short, they act like other human beings, and as they would *not* act, if they were shut up in dark, padded rooms, confined by strait-jackets, strapped to their chairs, lashed to their beds, or held by their attendants. As I entered the main building, a smart rain drove a large number of the patients inside the walls for shelter, and I saw nothing in their looks or actions which distinguished them from the ordinary class of French peasants. They all had a cheerful, healthy look, and their conduct was every way proper. Who will not exclaim with me, as I left the place: Surely, every lunatic asylum should have its AGRICULTURAL COLONY? There may be difficulties in aristocratic communities, like those of England and our Southern States, where labor is deemed disgraceful, and idleness or amusements only honored; in such countries, where the wealthy madman is considered far better than the poor plebeian insane, and companionship with a humbler class something contaminating and degrading, we can hardly expect this system to be fully adopted, if attempted at all. Hence, in the private lunatic asylums of Great Britain we see nothing of the sort; the spade, the hoe and the shovel, the rake, the scythe, and the sickle, are strangers to such establishments; and if the camerrole, the handcuff, the strap, and the manacle are equally rare, there is the dark padded room, which restrains the whole body, if it leaves the hands and the legs free; and I have known patients in such establishments remain thus secluded and confined for days, months, and in one instance a year, without any human society whatever, who, I have no doubt, would have been speedily restored to health, mental and bodily, if subjected to the exercise, orderly discipline, and hygienic influence of systematized agricultural employment. And this is dignified by the appellation of the *no-restraint system*. This "Colony of Fitz-James" is so called from a village of the same name, and is about a mile and three-quarters from Clermont, in the beautiful valley of the Breche, which is here from ten to fifteen miles wide. About thirty-five acres are surrounded by the river Beronnelle and a wall, so that if any of the patients had a desire to escape, which rarely if ever happens, it would be found somewhat difficult; the greater part of the farm, however, is without any inclosure. The colony is divided into four sections, each perfectly distinct from the other, and having its particular destination. The *first section*, that of direction or superintendence, is occupied by the dwellings of the director and male pay patients. The *second* is the *farm* proper, where the colonists reside. The *third*, that of the *small chateau*, is devoted to the female pay patients; while the *fourth*, the section of *Becrel*, is occupied by the females employed in washing, and laundry. The total number of patients belonging to all the sections is 306. The *first section*, as I have stated, that of *direction*, comprises a dwelling of two stories, occupied by the director and the pay-patients, and commands a view, on one side of the farm and its dependencies, situated at the extremity of an extensive lawn, traversed by the river Beronnelle, near the village of Clermont and the valley of the Breche. On the opposite side, adjoining the meadow, is the *Becrel section* and the village of Fitz-James. The part of the dwelling devoted to the boarders, consists of a basement divided into billiard, sitting, and dining rooms, apartments for the overseer or superintendent, a saloon, which serves as a parlor, etc. On the second floor are twenty rooms for males. The patients who occupy this section are tranquil incurables and convalescents.

2. The *Second Section* comprises the farm-buildings and the dwellings of the colonists. The latter is entirely separated from the farms, and has a view on one side of the village of Clermont, the section of superintendence, and the valley of the Breche; and on the other, of the cultivated fields belonging to the farms. The ground floor is occupied by ample apartments for the physician, the kitchen and day-rooms; the second and third stories are divided into five extensive dormitories. This building has a spacious court, planted with trees and flowers, with a grass-plot in the centre. The farm buildings cover about five acres. There are extensive stables, in which I counted near thirty white farm horses of the large Boulognais breed; a large barn containing threshing and other agricultural machines, a mill for griuding wheat, etc., all operated by steam power; extensive and well arranged buildings for cattle, sheep, and swine, of which large numbers of the best breeds are always kept. For example, I counted forty-two very large and beautiful cows, a cross between the Durham and Flemish, famous for dairy purposes; about one hundred swine of the Berkshire and Suffolk breed, some from the late Prince Consort's model farm at Windsor, many of which had taken the first premium at different agricultural fairs in France. There are also well constructed abattoirs or slaughter-houses, in which I noticed two slaughtered fat oxen, six sheep, and two calves, which I was told was the daily allowance for the inhabitants of the asylum and colony. In the winter, swine are substituted for calves. These, with the extensive sheds for carriages, carts, agricultural instruments, tools, etc., make up the principal buildings. A Swiss cottage on the Beronnelle creek contains a hydraulic dam which distributes water over the farm for purposes of irrigation, and also carries a mill for making cider; near the engine-room are two extensive and well arranged bathing-rooms, with every convenience found in such establishments. I also visited wine and cider vaults, containing immense pipes, each holding many hogsheads of cider made on the premises. A liberal allowance of both these beverages, Dr. A. Labitte informed me, was allowed to the patients.

The section of the *Small Chateau*, appropriated to female pay-patients, is a country house situated at the extremity of the inclosure of the Colony bordering on the village of Fitz-James, and separated from the farm meadows by the small river Beronnelle. It commands a distant view of the farm, and the section of the superintendent. This section occupies about fifteen acres, which are appropriated to a lawn and park. The main building consists of a ground floor, containing a dining hall, a saloon, and three rooms for the overseer; while the second floor is divided into five apartments. Adjoining this building is a wing containing the kitchen, bathing-rooms, woodhouse, etc. The *Section Becrel* is also situated at the extremity of the inclosure of the colony, and commands a view of the section of the *Small Chateau*, the farm, and the sides of the valley of the Breche. It is now occupied by one hundred and seven females, who are all occupied in laundry, both for the asylum and the colony. It comprises building for the patients and the laundry; the former consisting of a ground floor divided into apartments for the superintendent, a promenade, a refectory for eighty-seven indigent patients, a saloon and dining-rooms for twenty pay patients, and a second story divided into three dormitories. The buildings devoted to the laundry are opposite the first, and are composed on the ground floor of a folding clothes room, two rooms for depositing foul clothes, a bathing-room, a wash-room, etc. The wash-room is so constructed, that a branch of the Beronnelle flows through it, thus constantly renewing the water in the reservoir, around which the washing is carried on, on the smooth slab inclining inwards, the females standing at their work. In drying, the clothes are first exposed to hot air, and afterwards to the open air. The buildings above named surround an open green-sodded court, planted with trees and flowers, and embracing two and a half acres.

In regard to the administrative and religious organization of the Colony, which is under the exclusive control of M. Auguste Labitte, it is of course dependent on that of the Clermont Asylum. M. Alexandre Labitte is the sub-director, having charge of the administrative service and the agricultural department. Under him, is one responsible employé, a superintendent of the sections of the pay-pa-

tients and the farm, a superintendent of the section of the Small Chateau, and one for that of Becrel; in short, all the personnel of the colony, which is composed of thirty-two men and thirteen women, thus classified:—8 domestics for the service of the section of direction for the farm; 7 conductors of detachments; 4 gardeners or keepers; 7 carmen or drivers; 2 cowherds; 1 shepherd, 1 miller, 1 butcher, 1 chief mechanic, 1 cook.

For the Section of the Small Chateau, four domestics are employed: *For that of Becrel,* 3 guardians or keepers, and 5 superintendents of the workshops. The Curate of Fitz James is the chaplain of the Colony. Both male and female patients attend religious service at the village church, there being no chapel connected with the establishment; a want which will doubtless be sooner or later supplied.

An internal, or house-physician, resides at the Colony, and sees to the carrying out the medical prescriptions. The physician in-chief makes a visit of two hours in the middle of the day. He orders all the changes or transfers from the asylum at Clermont to the colony, and *vice versâ;* he prescribes the kind of labor for each patient; in fine, the whole moral and disciplinary management of the entire colony. As changes are constantly occurring in the mental condition and bodily health of the patients, so these transfers are correspondingly frequent, and the colony is thus complementary to the asylum, whose inmates are always so numerous (now reaching over 1000) that those displacements can always be made without injury to the general organization. When a colonist is afflicted by a return of his disease, or an exacerbation, which requires special treatment and surveillance, he is immediately re-transferred to the asylum at Clermont. The Colony is thus only the rendezvous of the strong and docile, who quietly submit to the ordered regularity of the service.

The medical end in view is to surround the insane, as far as possible, with the customs and habits of social life; life in common, occupations always useful, liberty wisely restrained. All these circumstances must necessarily introduce among the colonists friendly and reciprocal relations, interest them in their labors, and inspire them with sentiments of personal consideration, which lead them to appreciate services of which they are capable, and banish from their minds every idea of seclusion and restraint. No physical restraints are permitted; every intractable patient is immediately sent back to the asylum; and this transfer is a punishment which they greatly dread, and of course seek to avoid.

(*To be Continued.*)

Army Medical Intelligence.

The following named gentlemen have been examined, approved, and appointed in the corps of Volunteer Surgeons, to date from October 4th, 1862.

To be Surgeons:—Dr. Henry S. Churchman, of Illinois; Dr. Paul B. Goddard, of Pennsylvania; Dr. D. Hayes Agnew, of Pennsylvania; Dr. Alpheus B. Crosby, of New Hampshire; Dr. Edward Shippen, of Pennsylvania; Dr. Joseph Hopkinson, of Pennsylvania; Dr. Henry A. Martin, of Massachusetts; Dr. John R. McClurg, of Pennsylvania; Dr. Barton Darrach, of Illinois; Dr. Clayton A. Cowgill, of Delaware; Dr. Zemas E. Bliss, of Michigan; Dr. Bowman B. Breed, of Massachusetts; Dr. Sylvanus D. Freeman, of Pennsylvania; Dr. Israel Moses, of New York.

To be Assist. Surgeons:—Dr. William Moss, of Pennsylvania; Dr. John H. Brewer, of Maryland; Dr. George L. Sutton, of New York; Dr. Andrew H. Sheldon, of New York; Dr. George E. Pattee, of Canada; Dr. William Arthur Conover, of New Jersey; Dr. Andrew B. Chapin, of Michigan; Dr. Peter Cleary, of New York; Dr. Edward Dodd, of New York; Dr. Charles S. Frink, of Indiana; Dr. George A. Wheeler, of Maine; Dr. Sylvanus S. Mulford, of Indiana; Dr. Fred. A. Keffer, of Pennsylvania; Dr. Adolphus Major, of Dist. of Columbia; Dr. Samuel B. Davis, of Kansas; Dr. Henry A. Parker, of Massachusetts; Dr. A. C. Van Dozen, of Missouri.

Surgeon James McNulty, of the 1st Infantry, California Volunteers, in addition to his duties as Medical Director of the column from California, has been assigned to duty as Medical Inspector of the Department of New Mexico.

Surgeon D. O. Perry, 10th Maine Vols., has been discharged the service of the United States.

Assist. Surgeon Charles P. Russell, U.S.A., has been assigned to duty at Frederick, Md.

Medical Storekeeper Henry N. Rittenhouse, U.S.A., has arrived at Frederick, Md., and entered upon his duties in the Purveying Depôt.

Assist. Surgeon Joseph P. Wright, lately stationed at Jackson, Tenn., has arrived at Cairo, Ill., and entered upon the duties of Medical Purveyor.

Surgeon B. N. Comings, 13th Conn. Vols, Medical Purveyor at New Orleans, La., having been ordered away with his regiment, the duties of Purveyor have been assumed by Surgeon C. McCormick, U.S.A., Medical Director of Gen. Butler's command.

Surgeon B. J. D. Irwin, U.S.A., has arrived at Helena, Arkansas, and entered upon his duties as Medical Director of the Army of the South-West.

Assist. Surgeon Joseph S. Smith, U.S.A., has reported for duty at Fort Wood, Bedloe's Island, N. Y.

Assist. Surgeon S. H. Hornor, U.S.A., has returned from leave of absence and resumed his duties in the Patent Office Hospital.

Surgeon John E. Summers, U.S.A., has returned from leave of absence and resumed his duties in the General Hospitals at Alexandria, Va.

Assist. Surgeon B. Howard, U.S.A., has reported for duty to Maj. Gen. F. I. Porter, to relieve Assist. Surgeon Sam. Adams, U.S.A., who has been instructed to report to the Medical Director of the Army of the Potomac.

Assist. Surgeon Van Buren Hubbard, U.S.A., has been detailed as member of the Army Medical Board, now in session at Washington, D.C., for the examination of Surgeons and Assist. Surgeons of Volunteers, to relieve Surgeon J. H. Brinton, U. S. Vols.

Surgeon Basil Norris, U.S.A., just returned from a tour of duty in New Mexico, has been assigned to temporary duty in Philadelphia, as Inspector of Hospitals.

Surgeon C. K. Hughes, 37th Ohio Vols., has relieved Dr. J. F. White, in charge of the Greenup St. Hospital at Cincinnati, Dr. White having been assigned to the West End Hospital.

Assist. Surgeon Musgrave has reported for duty to Surgeon R. Murray, U.S.A., Medical Director of General Buell's Army.

Assist. Surgeon J. Minor, 42d Ohio Vols., has been relieved from duty at Covington, Ky., and ordered to join his regiment.

Dr. W. T. Brown has been assigned to duty in charge of the Marine Hospital at Cincinnati, O.

Surgeon W. W. Holmes, U. S. Vols., has been assigned to duty as Medical Director at the Headquarters of the District of Western Virginia, Gallipolis, O.

Surgeon John W. Hunt, U. S. Vols., is on leave of absence at East Groveland, N. Y.

Surgeon A. C. Hamlin, U. S. Vols., is in charge of the "Flying Hospital" attached to Sigel's corps.

Surgeon H. P. Stearns, U. S. Vols., has been transferred from Cairo, Ill., to Paducah, Ky.

Surgeon Jacob Bockee, U. S. Vols., lately Medical Director at Pensacola, Fla., has relieved Surgeon Comings, 13th Conn. Vols., in charge of the St. James Hospital at New Orleans, La.

Surgeon James Hatchitt, U. S. Vols., has been placed in charge of the General Hospitals at Perryville, Ky.

Surgeon J. C. Dalton, Jr., U. S. Vols., has arrived at New York, and entered upon the performance of the duties of Medical Director of Transportation.

Surgeon George W. Stipp, U. S. Vols, has relieved Surgeon Thomas Antisell, U. S. Vols., as Medical Director of the 12th Army Corps.

Surgeon Thomas W. Fry, U. S. Vols., late on sick leave, reports for duty from Crawfordsville, Ind.

Assist. Surgeon Samuel Adams, U.S.A., has been assigned to duty with the 1st U. S. Cavalry.

Surgeon Buckmaster, U. S. Vols., has been assigned to duty in charge of the General Hospital at Fort Scott, Kansas.

So much of orders as change the stations of Surgeons A. K. Smith, G. E. Cooper, and Robert Murray, U.S.A., has been suspended.

Assist. Surgeon J. H. Wythes, U. S. Vols., is on duty at the camp of "Exchanged and paroled prisoners," near Alexandria, Va. There are 4000 men in the camp, of whom 150 are on sick report.

Assist. Surgeon S. M. Horton, U.S.A., has been assigned to duty in charge of the Floating Hospital "Nashville," at Columbus, Ky.

Surgeon G. H. Hubbard, U. S. Vols., has been directed to report for duty in St. Louis. He has been for a long time in charge of the hospitals at Paducah, Ky.

General Hospitals under charge of Surgeon J. J. Milhau, U.S.A., at Frederick, Md.

No. 1. Assist. Surgeon R. F. Weir, U.S.A. United States Barracks.

No. 2. Assist. Surgeon I. F. Brinton, U.S.A. U. S. Hotel, City Hotel, Jail St. Schoolhouse.

No. 3. Assist. Surgeon J. H. Bill, U.S.A. New Episcopal Church, Presbyteriau Church, Old Episcopal Church, German Reformed Church, Methodist Protestant Church, Bonsall's Academy, Coppersmith's Building.

No. 4. Surgeon J. H. Thurston, U. S. Vols. Methodist Church, Winchester's Seminary, Lutheran Church.

No. 5. Surgeon H. S. Hewit, U. S. Vols. Novitiate, Convent.

No. 6. Surgeon I. B. Lewis, U. S. Vols. Upper School House, Bethel Church.

No. 7. Assist. Surgeon C. I. Wilson, U. S. A., Bowling Saloon, Tannery.

No. 8. Camp "A." Assist. Surgeon Notson, U.S.A. Camp near Alms-House.

No. 9. Camp "B." Surgeon T. B. Reed, U. S. Vols Camp on Shookstown road.

Second Assist. Surgeons.—The 3d section of an "Act to provide additional Medical Officers for the Volunteer Service" provides that instead of one Assist. Surgeon, as provided by the 21 section of the Act of July 22, 1861, each Regiment of Volunteers in the service of the United States shall have two Assist. Surgeons.

The Governors of some of the States have, in appointing the additional Assist. Surgeons, commissioned some as 1st Assist. Surgeons and others as 2d Assist. Surgeons, thus creating two grades (as in the case of First and Second Lieutenants) not allowed by law or recognised by regulation. This has led already to some trouble, the 1st Assist. Surgeons claiming rank, pay, etc., as Captains, and this is not the worst; they also claim seniority over the 2d Assist. Surgeons, which is a grave error, as both being of the same grade, they must take precedence according to date of commission.

MEDICAL DEPARTMENT OF THE WEST.

The following letter from Wm. Goodsmith, published in the *St. Louis Republican* of the 14th inst., speaks for itself, and is another proof of the ability with which the "Medical Department of the West" is administered by its chief, Assistant Surgeon-General R. C. Wood; and shows how much the medical service in the West has been improved since its establishment.

Corinth (Miss.), *Oct.* 6, 1862—12 P.M.

Hon. Mark Skinner, *President Sanitary Commission:*

Dear Sir:—I arrived here this morning about 12 o'clock, and have been busy all day, and up to this time, taking the names of the wounded. I was compelled to go from bed to bed. Our loss is about 750 killed and wounded; that of the enemy many times greater—nearer 3,000 than 2,000. This is the statement of the Medical Director, Dr. Holstein, made to me this afternoon, and it is corroborated by every one; and consequently I have great faith in its correctness. I can see through the hospitals that the secesh greatly outnumber the Union wounded. As usual there are horrible sights, but more among the enemy than among ours.

Our wounded, as a general thing, are much less severely hurt than they were at Iuka, while the enemy's are the other way. I send you a partial list, with the exception of the Second Iowa, which is accurate and complete. If you should find a name entered twice, you will understand the great difficulty of procuring such information, especially when I tell you my list will be used to make out the morning report. The telegraph will have informed you before this of the particulars of the fight.

There was a tolerable supply of hospital stores on hand, and our wounded have not suffered; in fact, *it is generally admitted that they are more comfortable than they have been after any battle in the West.* It is intended to occupy the Seminary Hospital again, which had to be abandoned, as it was within range of the artillery. It will be something of a job, as there are near 4,500 sick and wounded in tents out towards Iuka, one and a half miles from town.

Medical News.

New York Ophthalmic School.—Dr. Mark Stephenson delivered the Introductory to the *Eleventh Session* of the above school, on diseases, treatment, and operations on the eye, at the New York Ophthalmic Hospital, corner of 4th Avenue and 28th street, Oct. 24th, to a large and intelligent audience, composed of physicians and medical pupils from each of the medical colleges in the city. They were welcomed to the Hospital by the Lecturer, who stated to them the Institution was in a highly prosperous condition, giving relief to about 1000 patients per annum for the last ten years; and, according to the printed catalogue, it appears that over 300 pupils have graduated at the New York Ophthalmic School since its organization, 85 of whom were physicians, who had been several years in practice. He also estimated that half as many more had visited the Hospital from time to time, and attended the cliniques, who were not members of the Ophthalmic class.

He contrasted the treatment of diseases of the eye in former times with the enlightened methods of the present day, proving clearly that no department of medicine had made greater strides in modern times than ophthalmic medicine and surgery; he endeavored to impress upon his hearers the importance of attending to this department of the profession, especially these who intend practising in the country where adequate counsel is difficult to be obtained, hence the importance of their availing themselves of the advantages to be derived from attending the cliniques and lectures of an ophthalmic school. This branch of surgery should no longer be suffered to fall into the hands of empirics and charlatans, to the disgrace of our regular practitioners. Let this stigma be wiped from the profession. Every medical man, claiming to be an accomplished physician, should be acquainted with ophthalmic surgery.

He said: "Finally, gentlemen, think nobly of your profession. Remember that its end is beneficent, its studies *ennobling* and *elevating*, its ministration an exercise of your best faculties. To excel in it is worthy of all your aspirations and energies, but requiring mental and moral discipline, patient and persevering labor. Make of your difficulties a school in which strength of character may be tried."

The American Dental Convention.—The eighth annual meeting of this Convention was held at Trenton Falls, N. Y., commencing on the 5th of August, and continuing four days. It was largely attended, and its proceedings were animated and of an interesting character.

Original Lectures.

LECTURES
ON THE
DIAGNOSIS OF DISEASES OF THE HEART.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE DURING THE PRELIMINARY TERM.
SESSION 1862-63.

By AUSTIN FLINT, M.D.
PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE V.

Diagnosis of Aortic Lesions.—Discrimination of the Aortic Direct from the Mitral Regurgitant Murmur.—Pathological Import of the Aortic Direct Murmur; of the Aortic Regurgitant Murmur.—Association of the Aortic Direct and the Aortic Regurgitant Murmur.—Diagnostic Symptoms of Aortic Lesions.—Palpitation.—Pain.—Paroxysm of Distress, with Liability to Sudden Death.—Pulse.—Visible Movements of Arteries.—Dyspnœa.—Combination of Aortic and Mitral Lesions.—Means of Determining the Co-existence of an Aortic Direct and of a Mitral Regurgitant Murmur.—Intra-Ventricular Murmur.—Tricuspid and Pulmonic Valvular Lesions.—Tricuspid and Pulmonic Murmurs.—Symptoms of these Lesions.

Gentlemen:—In my last lecture I considered the signs and symptoms which are diagnostic of valvular lesions seated at the mitral orifice; we are now to consider the diagnosis of aortic lesions. These lesions, like the mitral, may be obstructive or regurgitant, or both obstructive and regurgitant; or, lastly, neither obstructive nor regurgitant, in other words innocuous. Here is a recent morbid specimen illustrating lesions affecting the aortic valves, so as to involve both obstruction and regurgitation. The valvular segments are shrunken and rendered rigid by calcareous deposit. You see, at once, that the orifice is contracted and patescent. I shall call your attention, presently, to the changes as regards the walls and cavities of the organ in this specimen, with reference especially to diagnostic symptoms. Here is another recent specimen in which the morbid appearances consist of a little atheromatous and calcarous deposit on and above the aortic segments. The orifice in this specimen is not contracted, and the valve is not incompetent to fulfil its function.

The existence of aortic lesions is shown by the presence of either or both of the aortic murmurs, viz. the aortic direct and the aortic regurgitant murmurs. The aortic direct murmur has the same relation to the heart-sounds as the mitral regurgitant, that is, it occurs with the first sound of the heart; it is a systolic murmur. Now, how are these two murmurs to be discriminated? The mitral regurgitant, as we have seen, has its maximum of intensity at or near the apex of the heart; it is best transmitted in a lateral direction to the left of the heart, and it is not propagated into the carotids. On the other hand, the aortic direct murmur has its maximum of intensity at the base of the heart, usually, indeed, a little above the base, in the second intercostal space; it is better transmitted in an upward than in a downward direction, being louder at the top of the chest than over the heart's apex, very rarely loud enough to be heard over the left lateral surface of the chest, and it is usually heard in the neck over the carotids. These differential points will suffice for the discrimination in the great majority of cases. They must be distinctly understood, and so impressed on the memory as to be recalled without effort, in order to be readily available at the bedside; but the points are so few and simple, that this will require but a little effort on the part of the student.

An aortic direct murmur is almost invariably present if obstructive aortic lesions exist. Its absence, under these circumstances, arises from weakness of the left ventricle, and it is very rarely the case that the aortic direct current is too feeble for the production of a murmur. But lesions which are not obstructive, which merely occur on a roughened surface, and, as regards their immediate importance, are innocuous, also give rise to this murmur; and the murmur, in the latter case, may be not less, but even more intense, than in the cases in which the lesions are important. The intensity of the murmur, and its quality of softness or roughness, have no significance as regards the gravity of the lesions. I shall presently call your attention to means, other than the characters of the murmur, by which the gravity of existing lesions may be determined. Moreover, an aortic direct murmur, as we shall presently see, occurs without the existence of any lesions, being due to a morbid condition of the blood; and the means of determining whether the murmur be due to lesions or not, will hereafter be a point for consideration. Suffice it to repeat, that aortic lesions, whether more or less grave, are almost invariably represented by an aortic direct murmur, and hence, the absence of this murmur is, in general, adequate proof of the non-existence of lesions at this orifice.

Lesions at this orifice which involve insufficiency of the valve, usually give rise to the aortic regurgitant murmur. This murmur accompanies the second sound of the heart. It is, strictly speaking, the only truly diastolic murmur, and hence need never be confounded with the other murmurs. It may generally be heard above the base of the heart, in the second intercostal space, especially on the right side; but its maximum of intensity is lower than this, near the left margin of the sternum, on a level with the fourth rib. It is propagated downwards rather than upwards, and is not unfrequently heard as low as the ensiform cartilage; sometimes it is propagated as low as the umbilicus. Not unfrequently it is heard over the apex. The murmur is usually soft and low in pitch. This murmur denotes the fact of regurgitation, but its significance is limited to this fact; it does not afford information as to the amount of regurgitation, or, in other words, the extent to which the aortic segments are incompetent.

The aortic direct and aortic regurgitant murmur are frequently associated. These two murmurs, of course, succeed each other precisely like the two sounds of the heart; they have the same rhythm. There is some liability of confounding these murmurs, when associated, with exocardial murmurs, or friction sound. The means of making the discrimination will be considered in connexion with the latter.

So much for the signs of aortic lesions. Let us now direct our attention to the diagnostic symptoms. In order to understand them, we must take into view the effects of aortic lesions on the heart. These effects are illustrated in the morbid specimen before me. You perceive that in this specimen the left ventricle is hypertrophied and dilated. The first effect of aortic lesions, whether obstructive or regurgitant, or both combined, is upon the left ventricle. It becomes, first, hypertrophied, and afterwards dilated. Next, the left auricle undergoes enlargement, and at length, if life be sufficiently prolonged, the right side of the heart becomes enlarged; but the enlargement of the right side of the heart, as a rule, is less than in cases of lesions seated at the mitral orifice. You perceive that, in this specimen, the increased size of the heart is chiefly due to the enlargement of the left ventricle.

Palpitation is a more prominent symptom in cases of aortic, than in cases of mitral, lesions. The heart acts with greater power, owing to the fact that the hypertrophy which results from the lesions affects especially the left ventricle. The patient is much more apt to complain of a powerful beating of the heart, and the augmented power is more marked when the hand is placed over the præcordia.

Pain exists oftener in connexion with aortic than with mitral lesions. Why this is so I am not prepared to say,

but clinical observation shows that it is so. In the cases in which that most painful affection, angina pectoris, occurs, the lesions are generally aortic.

Pain and palpitation occur in connexion with either obstructive or regurgitant lesions. But the latter give rise to certain symptoms which are distinctive of aortic insufficiency. One of these symptoms consists in paroxysmal distress, with a sense of impending dissolution. The patient suddenly feels as if the action of the heart was about to cease; the pulse is small, and perhaps irregular; there is an indefinite feeling of anguish. The paroxysms pass off after the lapse of a few moments, and they may recur after shorter or longer intervals. Sometimes they are provoked by an obvious cause which occasions excitement of the heart's action; but at other times they occur without any apparent cause. The paroxysms to which I now refer, so far as my observation goes, belong especially, if not exclusively, to the history of cases of aortic insufficiency. They are characterized by all the phenomena of an attack of angina pectoris, save the acute pain which belongs to that affection. They involve a liability to sudden death. And I may state here, that aortic, much more than mitral lesions, are apt to prove suddenly fatal; indeed, it is chiefly in cases of aortic regurgitant lesions that there is much danger of sudden death. Let me endeavor to explain the paroxysms to which I have just referred, and the occurrence of death suddenly in certain cases.

The immediate effect of aortic regurgitation is accumulation of blood in the cavity of the left ventricle. This cavity is distended with blood in proportion to the amount of insufficiency of the aortic valve. It is this accumulation of blood which leads to the hypertrophy and dilatation of the left ventricle. Under these circumstances a sudden increase in the accumulation is liable to occur, from various causes which accelerate the circulation. The ventricle then is unusually distended, and, especially after it has been weakened by dilatation, the ventricular contractions overcome with difficulty the distension. The muscular walls of the ventricle are paralysed by the pressure of the blood within the cavity. If, at length, the ventricular contractions are sufficient to expel the unusual accumulation of blood, the immediate danger is removed; the distress and feeling of impending death which accompany the condition just described disappear. But if the contractions of the ventricle fail to relieve the over-accumulation, of course it rapidly increases from the constant flow of blood from the auricle to the ventricle, together with the aortic regurgitation; the walls of the ventricle become more and more enfeebled by distension with a corresponding rapidity, and death takes place from paralysis of the heart.

The pulse, in certain cases of aortic lesions, offers some distinctive features. If the lesions are obstructive, the pulse is weakened, but the weakness is much less marked than in cases of mitral lesions with considerable obstruction or regurgitation. In cases of aortic insufficiency, however, the pulse is peculiar. The artery appears to strike the finger with quickness and force, and to recede quickly. The pulse is said to be jerking or collapsing. Dr. Hope called it the "pulse of unfilled arteries." This kind of pulse, in some cases, is quite characteristic. It is evidently due to the fact that in aortic insufficiency the aortic direct current meets a regurgitant current; the two currents come into collision. Another symptom pertaining to the arteries is sometimes very striking and characteristic. The arteries near the surface—the carotids, the temporal arteries, the brachial, etc.—present visible movements with each ventricular systole. These movements, in some cases, are remarkably conspicuous; the arteries, as Dr. Stokes remarks, seem like wriggling worms beneath the integument. Some time ago a patient at the Island Hospital presented this symptom in such a notable degree that the face and neck would at once attract the attention of any observer. This symptom, when marked, is quite distinctive, so much so that aortic regurgitation may be predicted with much confidence; but the symptom is by no means marked in all cases of aortic regurgitation, and hence its absence is not proof that regurgitation does not exist.

Dyspnœa is less frequently marked in cases of aortic than in cases of mitral lesions. The distress arising from the cardiac affection has reference to disordered action of the heart, more than to interference with the pulmonary circulation and the function of respiration. General dropsy is less apt to occur, owing to the fact that dilatation of the right side of the heart is of less frequent occurrence.

I have considered, gentlemen, the diagnosis of mitral and aortic lesions as they occur separately. But cases not unfrequently present themselves in which lesions exist at both orifices. The combination of mitral and aortic lesions is shown by the association of the mitral and aortic murmurs. Does not this combination constitute an obstacle to the discrimination of the murmurs? Generally not. We may have a single mitral associated with one aortic, or the two mitrals with one aortic, and *vice versâ*, or, finally, all the four murmurs may be combined. The mitral direct murmur and the aortic regurgitant murmur have such distinctive characters, that each is at once recognised without difficulty. The only source of any difficulty is in ascertaining that the aortic direct and the mitral regurgitant murmurs co-exist. But in most cases it is not difficult to determine this point. These two murmurs occur in the same period of time as regards relation to the heart-sounds, that is, both are systolic murmurs. But frequently the murmurs differ in pitch and quality, so much that it is at once evident they are two distinct sounds; one may be rough and the other soft, or one may be high and the other low in pitch. If they do not thus differ, the fact of the existence of the two murmurs may generally be ascertained by finding at the base of the heart and at the apex, an intensity of murmur distinctly greater than between these two situations. Sometimes a murmur is distinct at the base and at the apex, but wanting at an intermediate situation. You apply the stethoscope in the second intercostal space, and you hear a murmur; next, you apply the stethoscope over the carotid, and you find the same murmur, *i.e.* a murmur having nearly or quite the same quality and pitch. You know, then, that there exists an aortic direct murmur. You then carry the stethoscope gradually downwards towards the apex, and this aortic direct murmur is found either to diminish in intensity or cease before you reach the apex. But when you place the stethoscope nearer to, or over the apex, you find a murmur more or less intense; you carry the stethoscope to the left of the apex and you find this murmur transmitted to greater or less extent over the lateral surface of the chest, and perhaps to the back. You are then satisfied of the existence of the two murmurs, even if it should happen that they are of the same pitch and quality.

These means of discrimination will prove sufficient in the majority of cases; but it must be confessed that cases do sometimes present themselves in which it is difficult to decide whether there are two murmurs or only one, and, if the latter, whether the murmur be mitral or aortic. The cases offering this difficulty are those in which a murmur is produced by conditions within the ventricle; conditions involving neither aortic contraction nor mitral regurgitation. Roughness of either the ventricular aspect of the mitral curtains, or the aortic segments, sometimes exists, giving rise to a murmur heard with about equal intensity at the base and apex and also over the body of the heart. By way of distinction from an aortic direct and a mitral regurgitant murmur, I am accustomed to call the murmur just described an *intra-ventricular* murmur.

As regards the symptoms belonging to cases in which mitral and aortic lesions exist together, it is sufficient to say that the phenomena distinctive of each of these classes of lesions are combined in various proportions.

A few words, in conclusion, respecting murmurs produced by lesions seated at the orifices in the right side of the heart. Valvular lesions at the tricuspid and pulmonic orifices are rare, and when they exist they are generally

congenital. They are accordingly oftener met with in children than in adults. They may give rise to murmurs corresponding to those which emanate from the mitral and aortic orifices. I am not aware of the occurrence of a murmur corresponding to the mitral direct murmur. I know not why a *tricuspid direct murmur* should not occur; but I have no practical knowledge of its occurrence. I have the same remarks to make of a *pulmonic regurgitant murmur*. I suspect it occurs, but I have never made it out clinically. A tricuspid regurgitant murmur, I am persuaded, is not of very unfrequent occurrence. The tricuspid valve in health protects against regurgitation less completely than the mitral valve; and when considerable dilatation of the right ventricle takes place, either with or without mitral or aortic lesions, the tricuspid regurgitation is often a consequence. This is shown by the occurrence, in certain cases, of a jugular pulse synchronously with the contraction of the right ventricle. The tricuspid regurgitant murmur, however, as I suspect, is generally considered a mitral murmur, and I have not made the discrimination in practice sufficiently to indicate, from my own experience, the differential points. These points are stated to be the following:—The maximum of the intensity of the murmur at or near the xiphoid cartilage, and the propagation of the murmur to the right, rather than to the left of the heart.

A pulmonic direct murmur from lesions of the pulmonic orifice may frequently, if not generally, be discriminated from an aortic direct murmur by the following points:—The maximum of the murmur is in the left second intercostal space, and the murmur is not transmitted to the carotids.

The symptoms pertaining to the pulmonic and tricuspid lesions are those which denote enlargement, especially of the right ventricle and auricle, viz. venous congestion, jugular pulse, and dropsy.

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from p. 243.*)

Thus every kidney which was described as white or pale yellow, whether enlarged or not, had granular or fatty cells; or granular or fatty matrices; or two or more of these lesions at once, and in a sufficiently marked degree; while in those not so described, when there was any considerable change in either of these directions, if the color did not appear, there was a sufficient reason why it did not, except, perhaps, in the sixth and seventh of the above enumeration. One of these was of normal size, and the other was contracted. When these observations were recorded, I did not expect to find the pale color, except in the enlarged specimens, and it is possible I was not sufficiently careful in observing the point. However this may be, they had neither of them any extreme changes that a moderate congestion may not have concealed. But if they are admitted as exceptions, they cannot, as negatives, greatly invalidate a rule sustained by twenty-two affirmative instances. The rule then is, that to the granular or fatty disease of the cells and tubes or matrix of the kidney, one alone when it is considerable, or two or more of them combined, we are to look for the cause of the pale or white color of the kidney in Bright's disease.

The examination of the white, grey, or yellowish spots, which occur in the kidneys, such as have been described in another part of this discussion, shows that they are composed of granular matter, or oil, or both, usually in the matrix, but sometimes in the tubes. The extraordinary loading of the cells in spots only, is shown on the card No. 17. In that specimen the spots had nearly the color and general appearance of little purulent deposits; indeed nothing but the microscope would convince the attending physician that they were not constituted of pus. These were soft, and could be mostly pressed out of the organ. But there are pale spots of another kind which are wholly incorporated with the kidney, usually mottling it all through its structure. One of these will usually be found to be composed of irregular fibres more or less granular, and of small oil globules. The tubes have generally disappeared from these spots, or are contracted, empty, and fragmentary. As the other form is a local fatty disease in the tubes, so this is a local fatty disease of the matrix with equally local destruction of the tubes, and probably disintegration of fibres, once excessive. In these appearances we see that the same causes which produce the pale kidney, if they operate only locally, produce pale spots and mottlings.

The white or pale color noticed at the apices of the pyramids, is perhaps attributable in most to the granular degeneration of the cells in the strait tubes; in some, the contraction of the excessive fibrous tissue, making the apices very firm and hard, and expelling the blood at least after death. In a few instances it may be produced by oily deposits in the cells. Among the thirty cases this appearance was noted thirteen times.

Apices of pyramids, pale or white, in	. . 13
Tubes of the apices very granular, in	. . 8
Moderately fatty, ... in	. . 5

Among the eight that were very granular, there was general increase of the fibrous tissue in four; a special deposit of fibres within the apices, in one, and the excess was questionable in the other three. Three of those that were fatty, were at the same time fibrous, one was doubtful, and in one there was no excess of fibres. The very granular tubes contained a great deal of oil in two instances, were slightly fatty in one. The fatty tubes were at the same time granular in two. In three of the granular tubes, the granular substance had been rolled into cylinders, and was found in the central line of the tubes. In some instances the fibrous contraction in these pale apices had produced a scirrhous hardness. In one of the specimens there was no fibrous disease, no granular degeneration, and only a moderate accumulation of oil in cells of the apices; and it is necessary to state that among the specimens not embraced in this list, there were instances of fibrous disease and of granular and fatty affections of the tubes of the pyramids, in which the apices were not pale. Still these facts are worth something, and I offer them at their value, whatever that may be.

There are certain other facts, which, with their relationships, deserve notice, but which do not require the microscope for their observation, though it may be necessary sometimes for their explanation. Among these *the distribution of the vessels* may be considered.

Vessels were more or less stellate, or arborescent, or both in nine. The weight of these nine kidneys was severally 2¾, 3, 4½, 4½, 7, 7, 9½, 9½, and 12 ounces. Here it is apparent, that this rather striking feature of advanced Bright's disease does not belong to either of its leading forms exclusively. It occurred in two contracted and hobnail kidneys, in two of normal size, in which it was, however, barely noticeable or just beginning, and in five which were large and all pale, their color varying from a light yellow to a milk white. The fine interlobular vascularity is retained generally through the first and middle stages of the disease, but is finally replaced by that we are now considering, whether the kidney is increasing or diminishing in size.

The thinning or contraction of the cortical layer, diminishing the distance between the bodies of the pyramids and the external surface of the kidney, was observed in some that were increased in size, as well as in those that were diminished. Thus:

The cortical layer reduced in thickness, in	.	.	13
Fibres of the matrix in excess,	.	" .	8
Excess doubtful,	.	" .	3
Regarded as normal,	.	" .	2

In the two last the thinning was not considerable, but there were seven others having excess of fibres in which thinning was not noticed. Four out of thirteen had small elevations on the surface, like the beginnings of the hobnail appearance. Three were pitted on the surface, and one had irregular sinuses, the result of contraction. All but one had the cells either granular or fatty, in a greater or less degree. Nine had more or less of oil, and two others granules in the fibrous tissue. The weight of these kidneys, with one exception, was not considerable, viz. 2¾, 4½, 4½, 4½, 5, 5, 5½, 6, 6, 7, 7, 7, and 9½ ounces.

It is worth while to notice *the condition of the investing membrane of the kidney*, in the specimens which were fibrous. There is an impression that its thickness and firmness, and the strength of its adhesion to the organ, maintain a close relation to the degree of the fibrous disease. Whether this view is correct may be partly inferred from the following statements. The condition of the capsule was noticed in fourteen of fifteen instances of fibrous kidney.

The capsule thickened, or more or less opaque, in	.	.	6
The capsule of normal appearance, or nearly,	.	.	4
The capsule thin and diaphanous,	.	.	4

In the cases in which the increase of fibres was doubtful, the capsule was twice thick, strong, or more or less opaque; twice thin and diaphanous; and once normal; and in those having no excess of fibres it was once thick, strong, and opaline; once normal, and twice thin and diaphanous. Regarding the adherence of the capsule to the kidney, it is noted twenty-four times.

The adherence of the capsule, strong, in	19
Of these the kidneys were fibrous, (weighing 2¾, 3, 4, 5, 6½, 7, 8¼, 9, 9½, 9½, and 12 oz.) in	11
Excess of fibres doubtful, (weighing 5, 6, 6, 9, oz.) in	4
No excess of fibres, (weighing 4½, 4½, 5½, and 7½ oz.) in	4
Adherence normal and kidneys fibrous, in	4

The adherence was often so strong that the capsule tore away parts of the kidney when it was removed, but this also occurred in kidneys which were not fibrous. So that we are brought to this conclusion, that the capsule will be thicker and stronger and less transparent than is natural, in about one half the cases of fibrous kidneys, and that the firm adherence of the capsule to the kidney may be looked for in something more than one-half; but as the fibrous kidneys constitute one-half of the whole number, these conclusions are of but little value. In other words, the thickness and degree of adherence are probably variable in normal conditions, and their dependence on fibrous disease is uncertain, or only occasional.

The outline of the borders of the pyramids is sufficiently distinct and definite in the healthy kidney. It was distinct and definite in two thirds of those now the subject of study, but in the other third the borders had lost their usual appearance, and the tubular and cortical portions were more or less confusedly blended by the irregular prolongation, or feathery or radiated extension as it seemed, of the tubular into the cortical. The latter class were of large size, having an average weight of about nine ounces, and most showed an excess of fibres. Those in which the outline was distinct had an average weight of six ounces, though two of them weighed nine and a half ounces each, and one half of them had an excess of fibres. There is nothing in these statements beyond the fact that the confused and uncertain outline is noticed very generally in the large white kidney. It is probably produced by the separation of the parts of the pyramids as the kidney increases in size through granular, or fatty, or œdematous infiltration.

The condition of the pelvic membrane was not noticed in any of the cases first recorded. My attention was not called to it until the series was almost completed. It is noticed in only six cases.

The pelvic membrane was thick and opaque in	.	.	4
" " " thick and firm in	.	.	1
" " " bluish and ecchymotic in			1
" " " not thickened or opaque in			1

The five in which the membrane was in an unnatural condition were the five, as it happened, in which the fibrous accumulation was the greatest; and that in which it was in a natural condition, was a specimen in which the fibrous disease was partial, a portion of the organ being affected by it and a portion not. The number is quite too small to justify any general inference, but this reference may serve to call attention to a subject of minor importance in the history of Bright's disease. It often happens in the examination of urine that a few pus globules are seen when they are not expected; and when the symptoms, and their own small number, will not allow us to suppose that they are produced by catarrh of the bladder, or that they come from an abscess, or from the urethra. They are found in albuminous urine, or without albumen, in company with casts of the uriniferous tubes. Their number may be from six to twenty in a microscopical field among other sedimentary matters. It has often occurred to me that this pus might be the product of disease of an inflammatory character in the pelvis of the kidney. The kidney tubes have no power to produce pus, as far as is known, under any circumstances; and the fibrous matrix only under the influence of acute inflammation; and I of course exclude vaginal pus. This is usually recognised by the vaginal epithelium which accompanies it. In these cases I have not preserved a record of the condition of the urine, and cannot, therefore, say whether these pus globules were present or not.

Little pin-head elevations were in some instances observed on the surface of kidneys which were not the seat of the hobnail change properly speaking. They seemed in most instances to be lobular, and were sometimes bounded by the natural network of vessels. They probably were caused by the accumulation of granular or fatty matter in or about the convoluted tubes, or perhaps in some by slight irregular contraction of the fibrous tissue.

Little lobular elevations on the surface noticed in	.	.	9
Kidneys decidedly fibrous in	.	.	5
Excess of fibres doubtful in	.	.	3
No excess of fibres in	.	.	1
Cells and tubes very granular in	.	.	8
" " fatty in	.	.	1
Matrix more or less fatty in	.	.	9

The weights were 5, 6, 6½, 7½, 8½, 9, 9½, 12 oz. and one? (a part.)

Minute pits on the surface, or section, or both, were noticed in ten instances. They looked as if they might have been small vesicles that were shrunken or empty. How this appearance is produced I have not yet satisfied myself. Their association with one or more of the other lesions was not sufficiently uniform to make a citation of these relations instructive. They occurred in the large kidneys and those of normal size only.

The quantity of adipose matter about the pelvis of the kidney, and between the pelvic membrane and the renal structure, was noted in twenty cases, but there is no correspondence between the quantity of this tissue and the fatty or granular or fibrous disease of the organ.

Those who have had the patience to follow me through this tedious analysis cannot, I think, fail now to assent to the proposition made at the opening of this discussion, that the large white kidney is the result of a diseased action which, with a little modification, can produce the small or contracted kidney; or, in other words, that the two apparently, and in certain respects really different forms, are in the language of Bright's hesitating conjecture, "evidence of modifications in the diseased action," and nothing more. Whatever else the analysis has taught, or has failed to teach, it has not failed to show that neither the large nor the small has any lesion peculiar to itself. If the excess of fibrous tissue contracts the dimensions of the kidney and

gives it the hobnail surface, that same fibrous excess occurs also in the large kidney, and only fails to produce the same effects because its contractile tendencies are resisted and overcome by another morbid deposit, or on account of the early disintegration of the tissue itself. If granular degeneration of the tube cells, the infiltration of oil, granular and fatty decrease of the matrix, help to swell the size of the kidney, each and all of these lesions are found in the contracted kidney. The vascularity undergoes the same change in both. The tubes are often denuded in both. The shrinking of the malpighian bodies so often associated with the contracted organ has been seen in the large white kidney. All the lesions regarded as essential to either of the leading forms are shared by both in different degrees, except the œdema, which is probably resisted in the fibrous kidney by its contraction and firmness.

Before leaving this branch of the subject I will call attention again for a moment to the relations of alcoholic drinks to Bright's kidneys. In consequence of the loss of the ante-mortem histories already referred to, and neglect to record the habits of the patient in the earlier cases, I am only able to offer twelve cases for analysis. The results will not be very valuable, and yet perhaps not wholly useless. In this number nine were reported to have been intemperate, and though it is not so stated, it is fair to assume that they were all spirit drinkers. The weight of their kidneys was severally 3, 4, 4½, 4½, 4½, 7, 7, 7½, and 8½ oz.—three of normal size, two smaller, and four larger than natural; but in every instance death was caused by some complication, and in no instance was the kidney disease allowed to run its full course. Five of these kidneys were fibrous, three were normal in this respect, and one was doubtful. Four were decidedly, and four slightly fatty. Eight had granular epithelium. The kidneys of the three temperate persons weighed severally 2¾, 5¼, and 7½ oz. One was fibrous (2¾ oz.), the others were not. One (not fibrous) was decidedly fatty, the other two slightly so. One had very granular epithelium (the fibrous one), the other two were not granular. The smallest and most fibrous kidney of the thirty occurred in a temperate person. These cases, even on the supposition that the kidney disease was in all of them caused by spirit-drinking, do not give the fibrous kidney to the intemperate in much higher numbers than the general proportion, and certainly will not support the theory that the small kidney is expressly and exclusively a "spirit-kidney."

I submit these facts, without further comment, to the consideration of the Fellows, stating that the studies of which they are a summary, were begun for the purpose of ascertaining if possible the relations of the different lesions to each other, and especially whether the granular, fatty, and fibrous degenerations were so many distinct forms of disease, or stages in a single series of morbid processes. The conclusion at which I have arrived does not, in strictness, support either of these early suppositions. To make sure that I am understood, I will repeat it. It is that in in Bright's disease there are two leading pathological results (the small and large kidney) having their origin in a single morbid condition, viz. congestion; that the congestion, possibly in some instances mechanical, probably in some caused by an unnatural state of the blood, is commonly the consequence of impaired nerve force in the part, or paralytic; that the hyperæmia, whether it becomes inflammatory or not, impairs or prevents the nutrition of the epithelial cells and gives rise to exudations which vary in their character with the state of the system, the condition of the blood, etc.; that when the exudation is in a marked degree plastic, the contracted kidney is the result; when it is of a different character the kidney may become large and white; that as the exudations increase, the hyperæmia diminishes; and that through new laws of nutrition, at length a new distribution of vessels is produced, affecting equally both forms of organic degeneration.

I have met with an abstract of a paper in which Dr. Beale, of King's College Hospital, London, has lately expressed his conviction that cirrhosis is not a disease of the fibrous tissue of the liver, but, in effect, that observers have been deceived on this point by examining their specimens in water. "Many of the most delicate and beautiful textures," he says, "appear fibrous when placed in water and roughly examined." Cirrhosis with him arises from "a degeneration in the secreting cells." This is not the place to present the many obvious objections to this doctrine. But if it should be proved to be true and is applicable to the fibrous kidney, it will require a change in the explanation here and commonly given of the contraction in Bright's disease, and in the words by which we describe that state, but it will not affect the cardinal doctrines and facts of these remarks. Instead of "increase of the fibrous stroma" we may be obliged to say—the condition in which certain "textures appear fibrous when placed in water." But this is doubtless a fixed condition, existing in some kidneys and not in others, existing sometimes in one part of a particular kidney and not in other parts of the same organ, a condition of which water is a test. Let the contracted kidney be a wasting, with only an apparent increase of the fibrous element, still the apparent increase of the fibrous element will be found to occur in the large kidneys as well as in the small. It is true there may be some difficulty in explaining the character and state of Dr. Bright's hard kidney on Dr. Beale's hypothesis, should it become applicable to that organ. It may be necessary even to find a cause for the wasting itself. But these are matters which may safely rest until the new theory is confirmed and applied. It is, however, right to say that the microscopic examinations in these thirty cases were all made on thin sections moistened by their own fluid, or on portions picked to pieces and moistened with water.

Having occupied too much time with the consideration of the microscopic appearances of diseased kidneys, I will now run over as rapidly as I can, a few facts relating to the condition of the urine. My examinations of this fluid have only been such as all physicians make daily for practical purposes. They have not been extended into any elaborate analysis of it, or of the blood. They will not then disclose anything novel or striking. They may be useful to such of the Fellows as are not yet far advanced in the study of renal diseases, and in this view I am induced to present them. I take from the note-book in which such examinations are hastily recorded, one hundred cases in the order in which they were written, and consequently without selection. These are about one half the cases of Bright's disease, that I have seen in office and consultation practice during the last four years.

The specific gravity of albuminous urine, it is usually stated is low. It is undoubtedly the tendency of the disease to reduce the weight of the urine; but this tendency is so frequently counteracted by special conditions of the kidney, by the state of the system, and by concurrent diseases, that a low specific gravity is very far from being a test of Bright's disease. In one hundred and eight examinations made in one hundred cases, I have found it as low as 1002, and as high as 1042. The general account stands thus:

At 1006 and below, . . 14.	Between 1015 and 1020, 31.
Between 1006 and 1010, 21.	Between 1020 and 1025, 11.
Between 1010 and 1015, 22.	Above 1025 . . . . 9.
	108.

If we assume that 1015 is about the stand for the specific gravity of urine in health, only a little more than half these specimens (57) were at or below that figure. If we say that healthy urine should be rated between 1015 and 1020, then in 31 of these cases the specific gravity was normal, and in 20 instances it rose above the normal average. But there is reason to believe that certain complications have a good deal of influence in augmenting the specific gravity. Thus in twenty-four uncomplicated cases, it was—

At 1010 or below in	13	Average of the 24, 1012.
At 1010 to 1015 in	5	
At 1015 to 1020 in	4	
Above 1020 in	2	

While in four cases in which consumption and Bright's disease occurred together, the figures are 1018, 1020, 1020, and 1025; and in twenty-nine examinations of twenty-three cases of cardiac complication, they vary between 1006 and 1027, thus:

1010 or below . .	5	Average of the 23, 1017.
1010 to 1015 . .	6	
1015 to 1020 . .	6	
1020 or above . .	12	

In two cases beginning in pregnancy it was 1003 and 1042. When the complication is cirrhosis, the urine is commonly scanty, high-colored, and the specific gravity high. This is very noticeable as the end approaches. The urine from the large white kidney usually has a much lower specific gravity than from the contracted kidney. The latter is more frequently found with heart disease and cirrhosis than the former.

The color of the secretion is noted in eighty-two instances. It varied in different specimens greatly. It was of high color, more frequently in cardiac disease, cirrhosis, and phthisis, than in other complications, or in the uncomplicated disease.

It was of the color of pale sherry, or a deeper hue, in	24
More or less pale, ... in	32
Smoky or claret-color (4 after scarlet-fever), in	6
Red with blood or purpurine . . . . in	4
Of natural color, ...	16=82

(To be Continued.)

CASE OF STONE IN THE BLADDER.

By DR. FUNCKE,

OF FRANKFORT-ON-THE-MAIN.

(Reported by Prof. C. A. Lee.)

Mr. L——, aged 69, formerly always of good health, often suffered in the latter part of his life from gout. Two years ago he felt the first symptoms of stone in the bladder, which became aggravated to such an extent, that his medical adviser, a friend of mine, asked me in consultation. We decided upon performing lithotomy.

I performed the lateral section on the 15th of March, 1862, without any difficulty. I removed, while introducing the forceps six times, *eighteen* stones, from the size of two to four coffee-beans. Hæmorrhage during the operation was very inconsiderable. The pain, on the day following the operation, was again very severe in the bladder, and on the second day the patient suffered as much as before the operation. Upon consultation with my friend Dr. Sanson, I passed my finger and the forceps very gently into the bladder, thinking that we left, perhaps, part of a stone, or the shell of one, in the bladder. I could not, however, find anything.

This state of things went on until the tenth day after the operation, when the patient died quietly from exhaustion. The wound from the incision was perfectly healed and closed, on the morning of the ninth day, so that I passed from that time, three times a-day the catheter into the bladder, in order to empty it.

Post-mortem Examination.—Bladder half filled with urine. While making a longitudinal incision through it, a very few small particles of stony shells came out with the urine. The whole of the muscular coat of the bladder was very much thickened. The mucous membrane was divided into a great many pouches (pockets), like a network. When I raised the bladder on its apex, and shook it a little, four more stones fell out from these pockets, explaining in this way why the immense pain did not cease after the operation, and brought on the death of the man. The single pockets are surrounded by thick trabecular cellular-tissue, which explains why I could not find the three stones, secluded in the pockets.

The shell by which each stone is surrounded consists of the triple phosphate of ammonia and magnesia, whereas the stone itself is pure uric acid. The kidneys we found perfectly healthy, with the exception of a slight catarrh of the mucous membrane. This excludes the idea that the stones had formed, perhaps, in the kidneys, and had then migrated into the bladder, as we first thought possible, when I extracted the eighteen stones after the operation.

Frankfort-on-the-Main, Sept. 19, 1862.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, Feb. 15, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. BYRNE'S PAPER ON PELVIC HÆMATOCELE.

Dr. Watson had listened with much pleasure to the excellent *resumé* of this subject by the gentleman who had just preceded him, and thanked him for the able manner in which he had called the attention of the profession to a matter, which, with one or two notable exceptions, might be said to be as yet undiscussed. He could not, however, endorse all the views of his colleague. He believed, for instance, that the *ovaritis* was a primary element not to be eliminated in our consideration of the cases. Again, that the hæmorrhage was not a special disease, but merely an incident in its development. Indeed the disease might even end fatally without any free hæmorrhage at all. Two instances of this last had come under his own observation in the persons of two young women, in one of whom the autopsy revealed clots in the ovary itself. In short, many apparent incongruities might be explained away in these cases, if we only take the view that they are but different manifestations of the same disease.

He remembered the case of a lady, the mother of two children, and the subject of one abortion, who had most assiduously nursed a sick brother for weeks together. Her general health paid the tribute to her anxious affection, and at every menstrual period she would suffer severe pains in the ovarian region. In one of these paroxysms, more severe than the preceding, he was summoned to her aid at midnight. He found her in great agony, with some peritoneal symptoms; he administered a powerful anodyne, and at the end of a few days she returned to a condition of comfort. At the next month there was no disturbance, the menses having established themselves; but at the succeeding period, there being an aggravation of the old trouble, he was sent for. He found some uterine discharge, the *os tincæ* patulous, &c., and his suspicions looked decidedly towards an early miscarriage. Anodynes were unavailing. After several days there appeared from the bowels a black, bloody, offensive discharge, which continued for ten or twelve days, and was finally replaced by one of a purulent character. This latter continued for some six weeks; there then appeared a swelling in the left groin, looking towards the umbilicus, which at last gained the mesian line to within an inch or two below the umbilicus itself. The point here puffed out, and the skin being thin and evidently inclosing gas, he set it free with his bistoury. Its escape occupied some minutes, and for many weeks the gas rumbling in the abdominal cavity would find an outlet, along with occasional small fæcal discharges, through this opening. Her health continued delicate for several weeks, but the wound finally healed up, and now, after a period of ten years, he attended her in an easy labor not more than ten days since.

Another case was that of a domestic, who had been forced to keep her bed for several weeks; her sufferings were severe, and on examination he made out an induration in the right flank. He also felt *per vaginam* a hard, brawny-like mass, which he suspected might be scirrhous in its nature, and at the same time detected a uterus thrown out of

position. She afterwards found her way to one of our hospitals, and underwent an operation without benefit. She subsequently left this institution and again came under his care, when this tumor, after a few months, at last disposed of itself by suppuration.

At times the contents of these abscesses will be evacuated spontaneously through the rectum. They will fill up from time to time, and the patient will rid herself of the inconvenience in the way marked out by nature. These tumors, too, may even complicate pregnancy; he has in his mind a lady whose life was jeopardized from this cause, but whose succeeding delivery gave him no trouble whatever.

Dr. Peaslee agreed with Dr. Watson in his views of non-isolation, but could not regard the disease as essentially dangerous except from the amount of blood extravasated; in that event he believed that even a few minutes' hæmorrhage, when the admitted vascularity of the ovaries is considered, might be sufficient to cause death. In the case reported by Dr. Byrne, he was not satisfied as to the reason why an effusion so extensive should not have displaced the uterus, or what is more to be regarded, why the peritoneum should not have been dissected off so extensively from the organs as to preclude any reasonable hope of the patient's recovery. He had seen ten cases in all; of these the first three or four he did not recognise, but in all of them he thought that displacement of the uterus was a rather prominent feature.

In a certain class of cases the diagnosis might be easy; the sudden development of the tumor, for example, would hardly fail of directing our suspicions to the right quarter, but after the lapse of a few weeks our main reliance must be upon the history given by the patient. But even allowing our inability to discriminate between pelvic abscess and pelvic hæmatocele, we may still console ourselves with the assurance that the treatment in either case is identical. For his part he relied upon leeches, rest, and saline cathartics, to which mercurial inunction may be added. For the reason intimated by him a few minutes ago, where the effusion of blood is subperitoneal, and from one ovary, he would evacuate it, and when the tumor pointed more to the vagina than to the rectum he would not hesitate to follow the indication and open there. Indeed, he might say that his preferences were very decidedly in favor of the vaginal punctures, for by that procedure he escapes the probably ensuing strictures of the rectum, which in point of inconvenience and distress are not to be compared to those of the vagina.

Stated Meeting, June 18, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

Dr. B. Fordyce Barker said:—

Mr. President—A few weeks since a very valuable and interesting paper on pelvic hæmatocele was read before this Academy, which I had not the pleasure of hearing, although I have since read it. It is characterized by careful study, by thorough research, and in many respects it strikes me that it is altogether the best paper that has appeared in this country, and in some respects it is fully equal to any that has appeared in the English language. But this is not saying very much, as very little has been written upon the subject in the English language. I may say that almost nothing of any value has appeared with the exception of a lecture by Dr. West, of London, and a lecture by Dr. Simpson, of Edinburgh. As regards this pathological condition, the French and German pathologists are very much in advance of us; but, in fact, it has been but a very few years since this disease has been distinctly recognised or described by any one.

The author of this paper, Dr. Byrne, gives the credit to Nélaton of having first called the attention of the profession definitely to this pathological condition, but in this I think he is in error. The first who called the attention of the profession to the subject as a distinct form of disease was Bernutz, now of the Hôpital de Pitié, who published a series of papers in 1848. But previous to that time its occasional occurrence had been recognised in making post-mortem examinations. Even as early as 1761, Ruysch described a case. After that Frank, in the latter part of the eighteenth century, then Dr. Bright, and also Sir Benjamin Brodie and Velpeau, described the post-mortem appearances of cases of pelvic hæmatocele, but the condition was not recognised during the life of the patient. There were therefore no general ideas or principles deduced from these examinations. Bernutz then first published a series of papers in the *Archives Générales*, 1848, and after that Nélaton made this disease the subject of clinical researches, and the results of these studies have appeared in his *Clinical Lessons on Surgery*.

One of the greatest rewards which a scientific man can lay claim to, is the accorded merit of having first described a specific disease and recognised the laws of its development. Nélaton seems in my estimation to have utterly ignored the essay of Bernutz, and to have done him in this respect very great injustice, especially as the former copies in his lectures word for word, in several points, long paragraphs from Bernutz, and afterwards in subsequent essays upon that subject he gives great credit to several of his pupils, among others Viguès, who published an inaugural thesis in 1850, and Voisin, who also published a similar thesis in 1852. Since then French medical literature has been quite rich in this department of science. In the works of Bernutz, Aran, Becquerel, and Nonat, the subject has been very fully discussed; quite a number of cases have also been reported by German authors.

The disease is nevertheless a rare one, although it is believed that it will be found very much less rare in future, when the profession become cognisant of the proper mode of exploring its character. As I remarked before, very little has appeared in the English language upon this subject. Prof. Simpson wrote a very valuable lecture, and he evidently writes from a personal clinical acquaintance with the disease. Dr. West's lecture is very well written, showing as he always does in his writings a familiarity with the literature of the subject, and showing as he does in all his works that he writes not from any practical acquaintance with the disease at the bedside, but from a familiarity with the books in his library. Therefore what he has to say is of little value, except only as a resumé of the subject.

I have already expressed my very high estimate of Dr. Byrne's essay, which was read before the Academy, and which, I think, is calculated to do the Academy high honor, and which if sent abroad will be so acknowledged by foreign reviews and editors. I do not think the subject has been studied by the profession as it should have been, and I wish now to call attention to it for this very reason. I was not present when the paper was read, but I have read the proceedings of that meeting in the Bulletin; and from the discussion which followed afterwards, and which was taken part in by men of high position, I will say that it was very evident that they did not understand the real nature of the disease, for members rose and quoted cases which were evidently not cases of this affection at all, but cases of pelvic cellulitis, which is an entirely different thing—different as regards diagnosis, different as regards its pathological character, and different as regards its therapeutics.

I have now been connected with Bellevue Hospital with a large number of women under my charge for seven years, and have had the opportunity of making examinations with the late Dr. Kelly, and Dr. Sanger of Blackwell's Island, but I have never seen, until recently, a single case in hospital practice. I think there are some reasons why these cases are more frequent in the private than in the hospital practice, which I will presently refer to.

A few days since I discovered in my wards a case which I was then led from a superficial examination to suppose to be this disease; to-day I made a very careful examination in the presence of Dr. White of Buffalo, Dr. F. G. Smith of Philadelphia, and Dr. Ford of Pittsfield, and I found a

clearly marked case of the disease. This is the very first case of the kind that I have seen in hospital practice, though in private practice I have met with seven. I have here the history of the case in the hospital, which, with your permission, I will ask the House Physician, Dr. Brockway, to read, as it is drawn up in his handwriting.

Dr. Brockway then read the following:

Maria Jacobi, married, age 29, born in N. Y. Admitted to Bellevue Hospital June 7, 1862, with no hereditary tendency to disease. Always enjoyed good health until about five weeks ago, when she thinks she had a miscarriage. Something came from her which looked like flesh, though without any describable form. She was soon convalescent, and was up and about, until a week after, when she was seized with a very sharp and severe pain in the right iliac region, which soon extended over to the left side, and as far up the abdomen as the umbilicus. The pain was attended with some swelling, and the abdomen was excessively tender to touch. The pain was not ushered in by a chill, and she did not have much febrile movement, though she had considerable thirst. She had a good deal of headache, and some pain in the back. During the first three days she vomited considerably, but only now and then since. The pain, tenderness, and swelling continued, though somewhat diminished, until a day or two before admission, when they recurred with great severity, and she was advised to enter Bellevue Hospital, which she did on the 7th of June.

Admitted at about six o'clock Saturday evening. She was then suffering intense pain in the abdomen, particularly on the right side, but extending over the region already described. The tenderness was excessive, she being scarcely able to bear the slightest pressure of the hand over the part affected. There was not much swelling. The general condition of the system was one of prostration. The pulse was rapid and feeble, and attended by considerable febrile movement. There was no vomiting. The bowels not having been evacuated since the Monday previous, she was ordered an enema, which moved her bowels freely. Cloths wet with warm water were applied to the part, and gtts. xxv. of the tr. opii were administered internally.

June 8th.—Slept a little last night and says she feels somewhat better. Pain and tenderness still present. Complains of a burning sensation when she passes water. This condition has existed for several days. To relieve this she was ordered the spts. of nit. ether and liquor ammoniæ acetatis with some success.

June 9th.—Condition of patient not much improved. She still has a good deal of pain and tenderness. Cannot lie on the left side because, as she expresses it, "she has great pain, as if something was giving way inside." The bowels were moved by an enema, and she was ordered to have of Magendie's solution of morphia gtts. v. every four hours, together with the warm application to the abdomen as before.

June 12th.—Patient seems a little better, though she still complains of pain and tenderness in the part affected. The morphia has had the effect to quiet her, and she slept well last night. Seen by Dr. Parker, who, after a somewhat superficial examination, pronounced the case to be one of Uterine Hæmatocele. On making a vaginal examination, the os uteri was found tilted up behind the symphysis pubis. The uterus seemed, at the first impression, to be retroflexed, but a more attentive examination revealed an elastic tumor below and posterior to the uterus. The vagina and the contiguous parts were quite tender to the touch, and the examination inflicted considerable pain on the patient. Dr. Parker ordered the treatment already adopted to be continued.

June 18th.—Patient much better; pulse 80, rather weak; skin cool and moist, and she is able to sit up in bed for some time. She expresses herself as very much improved in health, has but little pain, and the tenderness is very much lessened. Has the morphia only occasionally, as she wishes it.

To-day, Mr. President, I visited the hospital for the purpose of making a careful examination, and was accompanied by the gentlemen I before alluded to. I examined the case very carefully. The general condition, as reported by Dr. Brockway, was very much improved; that is to say, the peritoneal inflammation, which very usually attends the invasion of this disease, had in a great measure subsided, the abdominal pain and exquisite tenderness were very much decreased, and she could bear slight pressure over the abdomen. There was very little tumefaction, and her countenance had very much improved in appearance. On making a careful physical examination, the uterus was found with the cervix high up behind the symphysis pubis, and a tumor filling the pelvic cavity, which, as the finger reached, seemed like an enlarged, retroverted uterus, but on pushing the finger higher up, it was found to be entirely distinct from that organ. On introducing the finger into the rectum, it was found to extend as high up as the sacrum, and to within an inch and a half of the anus, and was elastic. I use this term, as distinct from the term fluctuation, a point of importance to remember as assisting in the diagnosis of the disease from pelvic cellulitis. On introducing the sound it was found that the fundus was not retroverted, but retained its normal relation. Then with the sound lifting the uterus forward, this did not carry forward the tumor, clearly proving that the tumor was distinct from the uterus. There was a great deal of pain occasioned by the examination, though the patient bore it with becoming fortitude. The tumor I described as being as large as that of the fœtal head of six months. A better description, however, of its form was given by Dr. White, of Buffalo; he described it in size and shape like a large egg-plant. It was posterior to the uterus, and extended laterally, filling up the pelvic cavity. It then remained to determine the character of the contents of the tumor, and for the purpose I introduced into the tumor a small exploring trocar, and on withdrawing the needle, and leaving the canula and then withdrawing the canula, we found that the cavity of the tumor was filled with a very dark grumous blood. This was sufficient to settle the diagnosis, that it was truly a case of pelvic hæmatocele, as called by the French writers.

(To be Continued.)

NEW YORK PATHOLOGICAL SOCIETY.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

STATED MEETING, June 25, 1862.

(Continued from page 219.)

SPONTANEOUS FRACTURE FROM CANCEROUS DISEASE OF THE BONE.

DR. SAYRE exhibited several bones removed from the body of a woman, aged forty, who entered Bellevue Hospital last October, with a fracture of the upper third of the left thigh, which she stated had been produced by an attempt to rise from her chair. Various appliances were used, but no union by bone resulted. She was compelled to keep her bed, and some two or three weeks since, in attempting to rise from it, fractured her left thigh just above the knee; also a few days previous to death, while attempting to move in her bed, her right arm was fractured near the shoulder-joint.

On post-mortem examination the left thigh was found fractured two inches below the trochanter major, and united by fibrous tissue. From that point downwards the bone was very much flattened and twisted upon itself, and at the lower extremity of the twist the compact structure was so much increased that the medullary canal was obliterated. The fracture of the left thigh was at the junction of the middle and lower thirds, and through an osteo-sarcomatous cyst, two inches in extent and half an inch in diameter. The fracture of the humerus, situated about an inch below its head, was also through a cyst three-quarters of an inch in

diameter. The lower jaw contained one or two of these cysts. The specimens have been examined by Prof. Flint, jr., who failed to detect in them any evidences of cancerous disease. Dr. Sayre was inclined to think that the case was a simple one of fragilitas ossium.

CURIOUS CASE OF MALINGERING.

Dr. Sayre also presented a few specimens of coal removed from the skin of an imposter, and gave the following history of the case:—

Miss Purdy, aged thirty-seven, of Oncida, N. Y., of highly respectable parentage, of the ordinary stature and build, but of nervous temperament, was brought to the city a few days since by Dr. Perkins, who has been her constant attendant for the past four years, and a Mr. Wilcox, in order to get the opinion of the medical profession, on the case, which they stated had baffled the skill of all the doctors in the western part of the state.

The Dr. states that she menstruated at the age of fifteen, and continued regular until about the age of twenty-two or twenty-three, when she became irregular, and her general health impaired; about this time a peculiar secretion of black and thick crusts began to form on her face, and finally extended to the arm and hand of the left side, and also on the leg and foot of the same side.

This secretion at first looked like dark blood in spots, but soon extended over larger surfaces as described, grew thicker and blacker, and in a few months was perfectly dry and black like a mummy, when it would peel off with great pain, leaving the skin healthy but stained, and in a short time would be reformed.

During all this time she was watched carefully by her sister, mother, aunt, and other members of the family, and had the advice of some sixty different physicians, none of whom, as he states, could diagnosticate the case.

All the family and friends with whom I have talked unite positively in asserting that during this time, fourteen years, she has not had her bowels moved once, and has passed no water from her bladder except once or twice, when it was drawn off about four years since. For the last four years she has been under the constant care of Dr. Perkins who states that she has not passed a drop of water from her bladder, or fæces from the rectum, in that time; and that she has neither bladder nor rectum, but that both of these organs terminate in the vagina, from which he has been compelled from time to time to remove large quantities of charcoal, varying in size from two inches in circumference to four and five in length. The amount which he exhibits is several quarts.

Five or six stones are also exhibited as having been taken from the same place (the vagina).

He has also a quart or two of smaller pieces of charcoal, about an inch in length and half an inch in width, which she has vomited at various times, all of which are smooth and polished, whereas the others from the vagina are irregular and rough.

She eats wells and digests without difficulty, and he thinks the coal and stones are secreted in the system and from the skin, and has brought her to the city for the profession to examine her as a most remarkable pathological phenomenon. I saw her to-day, in company with Drs. Valentine Mott, Carnochan, Parker, Watts, J. R. Wood, Jacobi, B. F. Barker, Austin Flint, jr., A. B. Mott, and Livingston.

Her pulse was eighty-two, respiration a little hurried, heat natural, the mask had just been taken from her face, which was slightly stained in spots with charcoal; a large piece of coal was in the vagina, which I broke in removing; at the same time I did this I put my finger in the rectum and distinctly felt the orifice of the urethra, proving that there was both a bladder and rectum.

The mask was cut off from her arm and foot with a pair of scissors, and proved to be made up of cloth, wool, and glue of some kind, and covered with charcoal, leaving the skin underneath perfectly healthy, and thus unmasked the villany or ignorance of the pretender who brought her to the city for public exhibition.

Dr. Clark stated that he had seen a patient in the practice of Dr. Dubois who he believed did not pass any urine for nine or ten days, but in its stead large quantities of uric acid and triple phosphate in an almost pure state.

Dr. Conant alluded to the case of a girl who lived till she was thirteen years of age without any bladder or urethra. She was in the habit of passing a substance from her umbilicus which contained uric acid and other ingredients usually found in the urine. Dr. C. also referred to a case in the practice of Dr. Mussey, of Canaan, where it was the practice of the patient to pack away sheep's bones in the vagina with a view to obtain pity from the credulous.

Dr. Post stated that he had removed about two hundred pins and needles from the vagina and bladder.

Dr. Sayre remarked that Dr. Wood had in his possession nearly a quart of brickbats which were removed from the vagina and urethra.

DISSEMINATED CANCER.

Dr. Clark presented a specimen, and remarked upon it as follows:—

A woman was received into Bellevue Hospital some time in April, with double pleurisy and a little abdominal effusion. She was forty-one years of age, and enjoyed pretty good health until three months before. We attempted the cure of the pleurisy in the usual way, by the application of blisters and diuretics, but accomplished nothing. The woman rather suddenly and unexpectedly died, and at the post-mortem examination we found that the pleura covering the lungs and lining the walls of the chest, and also the surface of the peritoneum, were dotted all over everywhere with small flattened shining white deposits of a cancerous character, and that there was no accumulation of cancer in any other part of the body. The whole interest of the case consists in the fact that this woman had disseminated cancer without any accumulation sufficiently large to be fatal, or sufficiently large to affect any organ in the body except by irritation.

CANCER OF THE STOMACH, ETC.

Dr. Clark also presented a stomach which was the seat of a very grave disease. Here, sir, is a large tumor somewhat in the form of a polypus, the neck being of moderate size, and a tumor as large as my fist, perhaps a little larger, in the same stomach. I should remark that that is on the posterior and inferior portion of the stomach, at a point almost exactly opposite the opening of the cardiac orifice. Between that and the pyloric opening is a large patch of similar disease that has undergone pretty extensive ulceration. The coats of the stomach are enormously thickened in many situations, and particularly in the situation of this last deposit. The tissue of the stomach itself in other portions has undergone what appears to be fibrinous degeneration, so that the thickness is more than half an inch. Outside of the stomach and against the liver is a deposit of a similar material, softer than the morbid matter found in the stomach, I mean the tumors. The stomach is adherent to the liver, and at one point on the inferior surface of the liver there was a little pus found—only a very moderate quantity. The interest of the case consists in this: the difficulty of making a correct diagnosis of the condition of this person during life.

His age was about thirty-five. He complained of no illness until February last; then he had a little vomiting, some nausea, and felt a puffy tumor to the right of the median line, in a position which might correspond to that part of the stomach moderately enlarged. His history from that time until his admission into St. Luke's Hospital is very meagre indeed. He gradually became emaciated and exceedingly pale. He vomited from time to time, but not regularly; there would be many days when he would not vomit at all. The vomiting was not from the mere food in his stomach, but from the irritated condition of the sto-

mach independent of it—two or three times he had coffee-ground vomiting, which is characteristic of ulceration of the stomach from whatever cause. It was noticeable that the stomach refused to admit more than an ounce or two of fluid food at a time. When I saw him a few days before his death there was a movable tumor distinctly felt a little to the left of the epigastrium. I could distinctly appreciate its size. There was a tympanitic ringing as if from the stomach most of the time in the neighborhood of the tumor, and part of the time over it.

It was stated that the tumor was larger than when I saw it (a week or ten days ago if I remember correctly), and at that time the man had a very profuse vomiting of a material that was regarded as pus, and that he had a diarrhœa, the characteristic feature of which was, in the view of the physicians in attendance, purulent discharges. It was stated that after that the tumor diminished very much in size. It is plain that the true tumor could not have diminished after that, as it appears at the post mortem examination that the stomach was very large, and as its walls were very much thickened it would undoubtedly stand out and make the tumor appear larger than it naturally was. I should remark that when he first came under observation at St. Luke's, there was a little puffiness of the hands and a little œdema of the feet. We had the urine examined, and it was found slightly albuminous. The point of interest in the examination was this—Was this an abscess or was this tumor merely a thickened membrane that bounded the abscess or cancerous mass. Opposed to the first view was the fact that it was movable, easily movable for an inch forward and backward—the walls of the abscess in this position were almost always pretty firmly attached to the walls of the abdomen if near enough to touch it. I could hardly suppose that that was the diagnosis, yet the opinion of the physician who saw it was confidently in favor of it. Then the question was—Was it a malignant tumor and did it produce suppuration behind it to furnish all this pus? That seemed more likely; but when we come to the post-mortem examination we find that there was no place where pus could collect in any large amount. This material, then, which appeared to the physician in attendance to be purulent matter, must have been a secretion from the stomach or effusion from the mucous membrane itself.

The form of this disease as it appears from the examination of Dr. Watts, jr., is compound. The grey thickening of the stomach is made up, as he ascertains, mainly of hypertrophied fibrous tissue; but in the midst of the fibres he finds large cells with large nuclei, and such as he figured to me I am satisfied are of a cancerous character. I find also in that large flat tumor the same material, fibrous matter, in considerable quantity, and these large cells with large nuclei in considerable abundance. But in the polypoid tumor this material is quite different. In the flat and ulcerating tumor there are abundance of enlarged follicles, tubular tissue which is the exaggeration of the follicles of the organ. The large mass appears to be made up mainly of a few fibres, vessels, and nuclei cells—such forms of cancer are often found in the brain, and are of very rapid progress.

A new and economical method of treating intermittent fevers is recommended to us (from the wise men of the East) by Dr. Gondas. Dr. Schachaud, a physician at Smyrna, employs quinine endermically in these fevers; and he finds the quantity of quinine required for the cure, by this method, very small, and the cure itself unfailing. Ten or twelve drops of a concentrated solution of sulphate of quinine are taken into the little syringe; he pricks the skin (at any part) with a lancet, and then throws into the cellular tissue his ten or twelve drops. He usually injects during the maximum of the attack. One operation suffices for the cure. Dr. Gondas has, he says, repeated his experiments in a small way, and with success.—*Brit. Jour.*

American Medical Times.

SATURDAY, NOVEMBER 8, 1862.

AN ARMY MEDICAL SCHOOL.

The recent opening of the regular session of the English Army Medical School is an event of too much significance to pass unnoticed. Especially is it suggestive to us, whose army medical department is in a transitional state, and which, under the plastic influences of the times, is susceptible of the most perfect organization. We cannot let the occasion pass without again presenting the claims of an exclusive Army Medical School in this country.

Army Medical Schools are not of recent date. As early as 1747, schools of military medicine and surgery were established by the French government in connexion with the army hospitals in cities where large garrisons existed. These were principally at Metz, Toulon, Lisle, Strasburg, etc. The long and sanguinary wars of the latter part of the last, and the early part of the present century, had a powerful tendency to elevate the medical element of the army, and bring its merits into an honorable recognition. The continual efforts of the French Government to perfect its military organization led to the constant improvement of its medical department, and to the final establishment of its present justly celebrated military medical school at Val-de-Grace. To the influence of this school can be traced all those improvements in the medical service of the French army which render it now so efficient both in its professional and administrative character.

The regulations of the school at Val-de-Grace require that the applicant shall have obtained the degree of doctor—that is, he shall have become qualified for civil practice in medicine. He is then examined, and if found qualified by proficiency in his previous studies, and aptitude to learn, is admitted to the course of study. This course comprises the following subjects:—1st. Clinical medicine, which comprehends examination of the patient, etiology, diagnosis, indications of treatment, art of prescribing, post-mortem examinations, etc., etc.; 2d. *Clinical Surgery*, embracing a review in detail of the surgical diseases, operations, gun-shot injuries; 3d. *Regional Anatomy*, at length and minutely; 4th. *Chemistry* applied to hygiene and army purposes, as the analysis affords, medicines, poisons, gases, etc., etc.; 5th. *Operative Surgery*, by practice on the subject; 6th. *Military Hygiene and Medical Jurisprudence*, which comprehends the multitude of questions that relate to the health and diseases of armies. Most of these branches are taught practically at the bedside, on the subject, or in the laboratory.

The English Army Medical School is of more recent date. It grew out of the disasters of the Crimean war. The military commission which that war called forth, after full investigation of the condition and wants of the medical department, recommended the consolidation of the chairs of military surgery at Edinburgh and Dublin, and the institution of others, in connexion with the principal hospital in England. This was the foundation of the Army Medical School, Fort Pitt, Chatham. The army regulations require that the candidate for admission to the School shall

give satisfactory proof as to age, moral character, etc. In addition—

"He must possess a licence to practise Surgery and Medicine in Great Britain or Ireland. Degrees, diplomas, licences, and certificates of age and character, must be lodged at the Army Medical Department for examination and registry, at least one week before the candidate appears for examination. On producing the foregoing qualifications, the candidate will be examined in Anatomy and Physiology; Surgery; Medicine, including Therapeutics, the Diseases of Women and Children, and Pharmacy; Comparative Anatomy; Zoology and Botany, with especial reference to Materia Medica. The examination in Medicine and Surgery will be in part practical, and will include operations on the dead body, the application of surgical apparatus, and the examination of medical and surgical patients at the bedside. Candidates who may desire it may be examined in the Elements of Physics and in Physical Geography. After passing the preliminary examination, every candidate will be required to attend one entire course of practical instruction at the Army Medical School, before being admitted to his examination for a commission, on Hygiene, Clinical and Military Medicine, Clinical and Military Surgery, and Pathology of Diseases and Injuries incident to Military Service. These courses to be of not less than four months' duration. At their conclusion the candidate will be required to pass an examination on the subjects taught in the school."

The candidate having passed a successful examination enters the School at Chatham. The following are the regulations:—

"All gentlemen who have been successful in the competitive examinations, held twice a year (February and August) at Chelsea, for appointments in the medical service of the Army, attend subsequently, at Chatham, a course of practical instruction in the duties they will have to perform in the Army. The course lasts four months, after which an examination is held to ascertain the progress made by each candidate. The lectures on Military Surgery include gunshot and other wounds; arrangements for the transport of wounded; duties of Army surgeons in the field, during sieges, on transports, etc.; and other special subjects. Those on Military Medicine refer to the tropical and other diseases of the British possessions and colonies, and to the losses by disease in peace and war at home and abroad. The lectures on Hygiene comprise all duties relating to the examination of water, air, food, clothing, etc., of the soldier; his duties and exercise, and the circumstances affecting his health; the subjects of meteorology, statistics, and prevention of the principal diseases met with in the Army, on home or foreign service. The lectures on pathology have reference principally to the scientific examination of tropical diseases, and of other complaints which the Army surgeon is especially called on to investigate. The candidates also attend the wards of Fort Pitt Hospital to study the diseases of invalids under the Professors of Medicine and Surgery, the system of recruiting, and the modes of keeping the Army medical returns and records. They are also called on to make post-mortem examinations, to operate on the dead body, and pass through courses of practical instruction in the laboratory on the modes of recognising the qualities and adulterations of food, and in the microscopic room on the modes of microscopic examination of morbid tissues and of adulterations of food, etc. During his service at Chatham, each candidate receives an allowance of 5*s.* per diem, and 2*s.* per diem for lodging money if quarters are not found him. He wears uniform, attends the medical staff mess, and is under the usual military discipline."

The need of a higher order of educational qualification of the army surgeon, when first he enters the staff, has long been felt. This want during the present war has been more and more evident until it has become imperative. To meet this requirement there must be a special training of every young man who designs to enter the Medical Staff of the Army. It is not sufficient that he be simply qualified for civil practice to discharge his duties faithfully in the camp, on the field, and in the hospital. This part of his course of study is but the foundation upon which he is to rear the superstructure of his special education. To enter intelligently upon his duties, he must first become familiar with the habits of men aggregated in camp, their vices, their diseases, and their hygienic conditions; and he must learn Surgery in its application to military science as a new art. Until this special education is engrafted upon the qualification for civil practice, the medical staff of the army cannot take the rank it deserves, nor can our armies be well served.

The only remedy for this defect in the medical service of the army is to be found in a well appointed Army Medical School, at which the candidate shall be thoroughly and practically instructed in the special duties of his future profession. And the time has come when such a school should be established. The Surgeon-General, himself a practical teacher, has in his Staff the elements of a competent faculty. At the Seat of Government are numerous large and convenient military hospitals, one or more of which should become permanent institutions, to be devoted in part to the purposes of instruction. Already a museum is being formed under the supervision of the Surgeon-General, designed to embrace pathological specimens, missiles, and everything which will illustrate the surgery of war. Nothing, indeed, seems wanting to inaugurate on a large and liberal basis an Army Medical School, worthy of the nation capable of summoning to the field an army of a million of men. We trust the requisite legislation will be obtained during the approaching Session of Congress, and that in our next annual announcement of the Medical Colleges of the Country we can add to the list The United States Army Medical School.

THE WEEK.

Dr. D. J. Macgowan, a distinguished physician, who, for the last twenty years, has been connected with the work of Christian Missions in China, has just arrived in our city from Europe. As Dr. Macgowan has won enviable distinction by his unceasing and successful efforts to promote the diffusion and application of scientific knowledge and art among the Orientals, while he has himself been acquiring rare information relating to the social and sanitary condition of those people, it is to be hoped he will repeat among us the instructive series of lectures he recently gave in London. The Doctor was formerly a practitioner in New York, and is remembered with interest by those with whom he was associated in the establishment of the Northern Dispensary. His farewell discourse before the profession on "*The Claims of the Missionary Enterprise on the Medical Profession*," like his Chinese handbook on the magnetic telegraph, illustrate his happy method of reaching the popular mind. Dr. Macgowan will find himself among friends in this country.

—

In noticing the Commission appointed to consider the best method of employing the fund appropriated by Government for the purchase of artificial limbs for soldiers, im-

portant omissions were made. The following were its members:—Drs. J. Mott, Satterlee, Bache, Gross, Warren, and Van Buren. In its organization Dr. Mott was elected *President*, and Dr. Satterlee, *Secretary*. It should have been stated that Jowett, instead of Douglas, was one of the manufacturers selected.

—

During the past week the venerable Dr. Usher Parsons, of Providence, R. I., appeared before the New York Historical Society, and read a paper on the "*Narragansett Indians.*" Dr. Parsons, it will be remembered, was the Surgeon to the fleet of Commodore Perry, in the famous naval engagement on Lake Erie, during the war of 1812. Few men have retained their physical and intellectual faculties in equal vigor at his age. May he live long in the enjoyment of his distinguished reputation, both as a physician and a patriot.

Correspondence.

CORRESPONDENCE BETWEEN THE BELLEVUE HOSPITAL MEDICAL COLLEGE AND THE ARMY AND NAVY MEDICAL BUREAUX.

Bellevue Hospital Medical College,
Foot of 26th Street, East River.

Resolved,—That a cordial invitation be tendered to Medical Officers of the Army and Navy of the United States who may visit this city during the coming Session, to attend the Lectures, and avail themselves of the facilities for anatomical and clinical pursuits, which our Institution affords.

Resolved.—That the Secretary be instructed to transmit a copy of the foregoing Resolution to the respective chiefs of the Medical Department of the Army and Navy.
Passed Sept. 17, 1862.

Austin Flint, Jr.
Secretary.

Surgeon-General's Office, Washington City, D. C.,
Sept. 21, 1862.

Sir:—I have the honor to acknowledge the receipt of your letter of the 19th inst., transmitting "resolutions" passed by the Faculty of the Bellevue Hospital Medical College, inviting Medical Officers of the Army and Navy to avail themselves of the facilities which your Institution afforded for professional pursuits, etc.

In reply, please convey to the Faculty of Bellevue Hospital Medical College my thanks, and through me the thanks of the Medical Corps of the Army, for their generous invitation tendered through you.

While accepting such courtesies and kindnesses at the hands of our professional brethren, this Department hopes to be not entirely unable to repay them to the Medical world at large, by the collection in an available form of valuable statistics, and the preservation and preparation of the numerous pathological specimens with which this unhappy war is even now enriching our museum.

I am, Sir, very respectfully,
Your obedient servant,
Jos. R. Smith,
Act. Surgeon-General.

Dr. Austin Flint, Jr., Secretary of the Faculty,
Bellevue Med. Coll., Foot of 26th Street, E. R., N.Y.

Navy Department Bureau of Med. Surg.,
October 1, 1862.

Sir:—I have the pleasure to acknowledge the receipt of your letter of the 18th ult., addressed to the Hon. Secretary of the Navy, transmitting sundry resolutions passed by the Faculty of the Bellevue Hospital Medical College, September 17, 1862, tendering a cordial invitation to Medical Officers of the Navy, who may be at New York, to avail themselves of the lectures, and other facilities, for anatomical and clinical pursuits.

I shall be most happy to make known to Medical Officers of the Navy this generous and complimentary action on the part of the Faculty, and beg to express on behalf of the Naval Medical Corps, my grateful sense of the unusual advantages offered to those who may be fortunate enough to enjoy them.

Very respectfully, your obedient servant,
W. Whelan,
Per P. J. Horwitz,
Ass. to Bureau.

Austin Flint, Jr., Esq., Secretary of the Faculty, Bellevue Hospital Med. Coll., N. Y.

RESOLUTIONS ON THE DEATH OF DR. CHEESMAN.

At a meeting of the Physicians and Surgeons of the New York Hospital, held at the house of Dr. T. M. Markoe, Wednesday evening, October 15th, Dr. Valentine Mott presiding, the death of Dr. John C. Cheesman was announced, and a committee was appointed to draft resolutions of respect to his memory. The following resolutions were adopted:—

Whereas it has pleased an all-wise Providence to remove from among us our lamented colleague and friend, Dr. John C. Cheesman, therefore:—

Resolved, that in the death of Dr. Cheesman the public has lost an old and faithful servant, the Hospital a sagacious counsellor, and the profession an honorable and justly-honored member:—

Resolved, that we offer to the family of the deceased, in their great trial, the assurance of our sincere sympathy, and the hope that they may find in the long and honorable career of their revered head, and in the legacy of his good name and esteemed character, some consolation for their loss:—

Resolved, that a copy of these resolutions be sent to the family of the deceased, and that they be published in the medical journals.

Valentine Mott, *Chairman.*
W. H. Draper, *Secretary.*

Army Medical Intelligence.

Orders.—Asst.-Surgeon B. A. McNeill, 69th Penna. Vols., has been granted leave of absence to enable him to be examined for promotion by the State Medical Board in Philadelphia.

Surgeon John H. Brinton, U.S. Vols., has been relieved from duty as President of the Medical Examining Board in session in Washington, that he may devote his whole time to the collection of material for the Surgical History of the War, and to superintending the selection and preservation of specimens for the Army Medical Museum.

Surgeon Thurlow Conyngham of the 101st. N.Y. Vols., has been dismissed the service.

Surgeon John T. Carpenter, U.S. Vols, has been assigned to duty as Medical Director of Hospitals at Cincinnati and Camp Denison, Ohio, and Covington, Ky.

Dr. Rollin T. Baker has been directed to report to the Medical Director, at Philadelphia, Pa., for duty in the Chestnut Hill Hospital.

Asst.-Surgeon Joseph T. Smith, 5th N. Y. Artillery, has been directed to report for duty to the Medical Director, at Baltimore, Md.

Surgeon Paul B. Goddard, U S. Vols., has been placed in charge of the General Hospital, Master Street, Philadelphia, Pa.

Dr. A. S. Maxwell has been directed to report to Surg. M. K. Taylor, U. S. Vols., in charge of General Hospital, at Keokuk, Iowa.

Surgeon Israel Moses, U.S. Vols., has relieved Surgeon

B. B. Breed, U.S. Vols. (under orders for Newbern, N.C.) in charge of the Finley Hospital, at Washington, D.C.

Surgeon Ferris Jacobs, U.S. Vols., has been directed to relieve Asst.-Surg. J. H. Pooley, U.S.A., in his duties at the Convalescent Camp, near Alexandria, Va.

Surgeons Timothy Haines and James King, U.S. Vols., have tendered their resignations to the War Department.

Asst.-Surg. E. Gregory, 17th Conn. Vols., now on duty at McKim's Mansion, Baltimore, has been directed to rejoin his regiment.

Asst.-Surgeon J. F. Mechem, U.S.A., has been relieved from duty at Benicia Bks., Cal., by Asst.-Surgeon J. C. Snorb, and assigned to duty at Alcatraz Island, Cal.

Dr. William Hayes has been assigned to temporary duty at Presidio de San Francisco, Cal.

Asst.-Surgeon J. H. Forwood has been placed on temporary duty in the Office of the Medical Director at Washington, D.C.

Surgeon Zenas E. Bliss, U.S.A., has been assigned to duty, superintending the fitting up of General Hospitals at Baltimore, Md.

Dr. W. V. Keating has been assigned to duty in the West Philadelphia Hospital.

Surgeon W. H. White, U.S. Vols., is on leave of absence for twenty days, at Wilmington, Del.

Surgeon John A. Lidell, U.S. Vols., has been assigned to duty at the Stanton Hospital, Washington, Del.

Asst.-Surgeon W. A. Conover, U.S. Vols, has been ordered to report for duty to Surgeon Jno. E. Summers, U.S.A., 1st Division, General Hospital, Alexandria, Va.

Surgeon R. K. Smith, U.S. Vols., arrived in Washington on the 30th ult. from New Orleans, Ga., on leave of absence.

Dr. Landon Wells has been directed to report for duty at the Fairfax Seminary, near Alexandria, Va.

Dr. C. W. Clark has been ordered to report for duty at the Convalescent Camp, Alexandria, Va.

Asst.-Surgeon P. Cleary, U.S. Vols., has been assigned to duty at the Harewood Hospital, Washington, D.C.

Surgeon William Hayes, U.S. Vols., has been placed in charge of Island Hall Hospital, Washington, D.C.

Surgeon D. Hayes Agnew, U.S. Vols., has been assigned to the General Hospital, Hestonville, Pa.

Asst.-Surgeon J. H. Pooley, U.S.A., recently in charge of Convalescent Camp Hospital, near Alexandria, Va., has been directed to report at the Headquarters of the Army of the Potomac.

Asst.-Surgeon A. M. Clark, U.S. Vols., and Hospital Steward Perkins, U.S.A., stationed at the Union Hotel, Georgetown, D.C., have been confined in the Old Capitol prison, by order of the Secretary of War, for brutal conduct to a convalescent paroled soldier in that hospital.

Surgeon S. F. Elliott, U.S. Vols., has been assigned to duty with the 1st Battery Conn. Vols. at Beaufort, S.C.

Surgeon N. R. Mosely, U.S. Vols., has been placed on duty as Inspector of Hospitals at Frederick.

The order assigning Asst.-Surgeon M. S. Rowlands, 118th Penn. Vols., to duty at the Camp of paroled prisoners has been revoked.

Surgeon J. D. Robison, U.S. Vols., is on duty at the Headquarters of the 6th Army Corps.

Dr. Josiah Andrews of Mich. has declined the appointment of Asst.-Surg. of Vols.

Dr. W. H. Hudson has been directed to report to Col. M. Coggswell, 2d N.Y. Artillery, near Fort Corcoran, Va.

Medical Storekeepers.—The following rules have been adopted in the case of medical storekeepers: All medical supplies to be turned over to the storekeeper by the purveyor with whom he may be stationed. Medical storekeepers have a right to appoint their own clerks and employés. They have no assimilated rank. When stationed with a medical purveyor, they are subject to his orders.

Medical Inspectors.—The following reorganization of Medical Inspectors' Districts, has been made in the Department of the West, by order of Asst. Surgeon-General Wood.

Medical Inspector Keeney's district to consist of the States of Illinois, Wisconsin, Michigan, Minnesota, and Iowa. Headquarters, Chicago.

Medical Inspector Lyman's district to consist of the States of Ohio, Indiana, and Kentucky. Headquarters, Cincinnati, Ohio.

Medical Inspector Allen's district to consist of Tennessee, Arkansas, Mississippi, and Alabama. Headquarters, Jackson, Tenn.

Artifical Limbs.—The manufacturers of artificial limbs, who have been selected to furnish such to the soldiers, have been directed to keep a record in each individual case (to accompany their accounts when rendered) of the following circumstances: The limb supplied, right or left. Nature of injury necessitating amputation, and amount of limb lost. Amputation, where performed, in the field, or in hospital. Length of time elapsed between injury and amputation. Nature of operation, whether flap or circular. Name of operator. Length of time between operation and fitting of artificial limb. Size of stump, compared with corresponding proportion of uninjured member remaining. General condition of stump. Apparent usefulness of new limb, as long as under observation. Post-Office address of each person after departure from hospital, and any other circumstances worthy of record.

A Medical Inspector has been directed to proceed to Annapolis Junction, Md., and examine the General Hospital there, with a view to its discontinuance.

A General Hospital has been established at Sarcoxie, Mo., by Surgeon H. Nauman, 9th Mo. Vols., acting under orders from General Steele.

DISEASES IN THE ARMY.

[Army Correspondence of the American Medical Times.]

Corinth, Miss., Oct. 18, 1862.

Two more great battles have been fought in the west and victoriously won, and the usual amount of labor in caring for the wounded gone through with. The sick and wounded are being removed north as rapidly as transportation can be furnished from this place to Columbus, Ky., one hundred and forty-three miles by rail, and thence by steam to other points. It is the intention now to remove from this place all but the very worst cases of wounded, which will probably number two hundred, and take two or three weeks before they can be transported with safety. At Jackson, Tenn., there are good hospital accommodations for one thousand sick, which can be increased if necessary; though as it is getting late in the season, probably there will be nothing further required. The rebel sick and wounded have mostly been sent to Iuka to be cared for by their own surgeons, though we furnish them with food and medicine. It is astonishing to see the amount of indifference they show their wounded, and I am sorry to say they are, in consequence, dying very rapidly. I speak now from observation here, but I know nothing about them since they have been sent away. While here our surgeons worked with them as faithfully as with our own men, while their surgeons mostly deserted their posts and went to town seeking their own pleasure. The men begged of us, for God's sake, to take care of them, and not turn them over to their own surgeons. What a comment on the chivalry of the South. Tetanus is the scourge and dread of the surgeon. Is there no remedy for it? Has nothing been found to stay its progress? Must the brave who pass through the fiery storm of battle finally fall victims to this disease? My friend and townsman, Lieut.-Col. ——, 2d Iowa, has just died with this horrible disease. He was wounded in the battle of Saturday by a round ball striking him on the inside of the great toe of the right foot, passing backwards under the deep structures and lodging in front

of the os calcis, from which point it was removed by an incision through the sole of the foot soon after it was received. I saw him on Wednesday evening following, and at that time he was feeling well and comfortable, no unfavorable symptoms, and wound looked well. I did not see him again until Saturday evening, when I learned he was suffering from tetanus. The first symptoms, stiffness about the muscles of the jaws, first appeared on Friday morning, but did not attract particular attention until the afternoon. The discharges about the foot had not been very free, and as there was now some swelling the wound was freely opened, and a tablespoonful of unhealthy pus discharged, and hot poultices and fomentations applied. The bowels were opened and afterwards anodynes were given, or so reported. But the disease gradually increased in severity, paroxysms occurring every half hour, unless he was under the influence of morphine or chloroform. This had been the treatment up to Saturday evening, when I first learned he was suffering from this disease. Prof. Hughes, of Keokuk, Iowa, Surgeon Marsh Turner, and myself, called at the request of his brother. We found him with pulse 100 and good strength and volume, skin moist, extremities warm, no fever. When not under the influence of chloroform his intellect was clear, so that he could write, but rigidity of muscles of jaws and throat would not admit of conversation, etc. The medical gentlemen in attendance I do not recollect by name, but they seemed to think he was decidedly better than in the morning, the paroxysms less severe and frequent. The discharge from the wound was free, and the symptoms decidedly more favorable. Such being the reported condition, it was finally decided to continue chloroform and anodynes, with beef tea, and hot applications to foot, and wait until morning for further action. Amputation had been suggested. The morning found the patient worse, paroxysms more frequent, intellect clear and fully comprehending his condition. It was decided to chloroform the patient and freely open the whole track of the ball, and if nothing was found, to amputate the leg, as a last final resort and hope. It was done immediately. Nothing was found in the track, and to get above all fibrous structure amputation was performed below the knee. Reaction came on fully, but I do not think the frequency or severity of the paroxysms abated in the slightest. From 3 o'clock P.M., they increased rapidly. I saw him at 5 P.M., when convulsions occurred every eight to ten minutes, unless fully under influence of chloroform; pulse 140, small, skin moist, respiration 30, intellect dull. At 8 o'clock P.M., one tremendous convulsion closed the career of as brave a man as ever lived. In the same house a rebel died the day before of same disease. He was shot through the leg, not fracturing the bone I think. Amputation was performed after the disease commenced, but with no benefit. Not having seen this case I am unable to give its history.

Yours etc.,

Charles H. Rawson,
Surgeon of Volunteers.

FLYING HOSPITALS.

[To the Editor of the American Medical Times.]

Sir:—The allusion which is made in your editorial remarks last week to the employment of pack-mules for the speedy transportation of medical supplies on the battle-field, undoubtedly has reference to the plan devised by Dr. A. C. Hamlin, Surg. U. S. Vols., in charge of the "Flying Hospital" attached to General Sigel's Corps.

From personal knowledge of the excellent working of Dr. Hamlin's "Flying Hospital," I can corroborate the testimony that has been given in its favor.

When visiting the army soon after the inauguration of this improvement in Gen. Sigel's Corps, we learned that Dr. Hamlin, the Assistant Director, had procured a number of mules and equipped them with a sort of *couslet* arrangement of pack-baskets as cases for surgical and hospital supplies, adapted to the wants of the battle-field. The entire plan was at once so simple and inexpensive, that it might be adopted by every Division Director in the army. Dr. H. informed the writer that he deemed it desirable to have a portable operating table, and every needed supply for wounded, exhausted men, included in each department of this *ambulance volante*. The animals and their drivers need to be properly trained, and there should be one or two extra mules in each detachment, to supply without delay the place of those beasts that become disabled from casualties. It is the design of this admirable plan to provide and always to have upon the ground wherever the *Corps d'Armee*, or any division thereof may be, an equipped detachment of these pack-mules ready to accompany the surgeon, and instantly to go wherever ordered to meet the exigencies of battles and skirmishes.

It is most creditable to the Medical Bureau that such improvements are generously encouraged by its aid and approval; and it is worthy of note that the talented young surgeon who devised this branch of ambulance service has been officially ordered to act as the Director of the "Flying Hospital" in Gen. Sigel's *Corps d'Armée*.

The manifest advantages of such means of transportation where carriage roads are obstructed or wanting, and when the greatest expedition in the movement and placing of supplies is required, render this branch of ambulance service worthy of special attention. Similar reasons would occasionally add to this branch a train of mule litters for transporting disabled men from the field. But the litters are needed only in exceptional instances, while the *flying train of medical supplies* will be required on every battle-field.

E.

New York, Nov. 3, 1862.

MEDICAL DEPARTMENT OF THE WEST.

CIRCULAR NO. 9.

Assistant Surgeon-General's Office,
St. Louis, Mo., Oct. 24th, 1862.

The attention of Medical Directors is called to the fact that the Hospital Fund has been used improperly, and appropriated to other than its legitimate objects

The Hospital Fund belongs to the Sick Soldier, and is to be expended by the Commissary, upon the requisition of the Surgeon, in the purchase of such articles for his subsistence and comfort, as are not otherwise furnished.

The practice of Medical Officers boarding in Hospitals, and using Hospital supplies, is strictly forbidden. In all cases where this practice is discovered, the names of the Medical Officers will be reported to this Office, that their cases may be submitted to the War Department. The contracts of employed Civilian Surgeons, detected in using the Hospital Fund improperly, will be at once annulled.

R. C. Wood, *Assistant Surgeon-General.*

Dr. Eulenberg has lately made researches to ascertain the connexion between hypertrophy of the heart and disease of the cerebral arteries and apoplexy. He comes to the conclusion that, in by far the greatest number of cases of cerebral haemorrhage, the predisposing cause is degeneration of the large and small cerebral arteries. The small vessels are fatty, or atrophied and enlarged: the large vessels are calcified and fatty. The results of these conditions are ruptures and apoplectic effusions. A not uncommon cause of apoplexy is aneurism of the larger cerebral arteries. Hypertrophy of the heart is much less frequently associated with apoplexy than arterial degenerations. In one hundred cases of apoplexy, 14.3 per cent. presented no appreciable changes either in the heart or in the great vessels.—*Brit. Jour.*

Dr. Wm. Warren Greene, of Maine, has accepted a Professorship in Berkshire Medical College. During the present term, Prof. G. gives the course on Theory and Practice; and also during the last half of the term fills the chair of Clinical Surgery.

Original Lectures.

LECTURES

ON THE

DIAGNOSIS OF DISEASES OF THE HEART.

DELIVERED AT THE

BELLEVUE HOSPITAL MEDICAL COLLEGE DURING THE PRELIMINARY TERM.

Session 1862-63.

By AUSTIN FLINT, M.D.

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE VI.

Subdivision of the Second of the Heart-Sounds into an Aortic and a Pulmonic Sound.—The Study of these Two Components of the Second Sound separately.—Situations where the Aortic and the Pulmonic Second Sound are to be observed separately, and the Different Characters which belong to each Sound.—Weakening of the Aortic Sound, and Intensification of the Pulmonic Sound in Cases of Mitral Obstructive and Regurgitant Lesions, as the Means of Determining the Existence and Amount of Obstruction or Regurgitation which the Lesions Involve.—Weakening of the Aortic Sound as Evidence of the Damaged Condition of the Aortic Valvular Segments.—Inorganic, Anæmic, or Hæmic Murmurs.—Occurrence of the Mitral Direct Murmur without Mitral Lesions, and the Explanation of this Fact.—Explanation of the Relative Weakness of the Valvular Element of the First Sound, in Health, as Compared with the Second Sound.—Circumstances which Enable us to Determine whether an Aortic Direct Murmur be Organic or Inorganic.—The Venous Hum, or Bruit de Diable.

Gentlemen:—My two last lectures were devoted to the signs and symptoms involved in the diagnosis of mitral and aortic lesions. And, since my last lecture was delivered, I have brought before you, in the wards of Bellevue Hospital, cases exemplifying all the murmurs, together with the more important of the symptoms. Collecting together the patients in my own wards, and availing myself of the courtesy of my colleague, Dr. Greene, you have had the opportunity of leisurely observing the diagnostic phenomena in a large number of cases. You have listened to the mitral direct murmur existing alone; to the mitral direct and mitral regurgitant existing together; to the mitral regurgitant alone, and with the aortic direct murmur; to the aortic direct murmur and the aortic regurgitant murmur, each existing alone and associated. In some of these cases the diagnostic symptoms of disease of the heart are present in a marked degree, viz. dyspnœa, lividity, paroxysmal distress, dropsy, jugular pulse, visible pulsation of the arteries, etc.; in other of the cases more or less of these symptoms exist in a less marked degree; and in some of the cases scarcely any symptoms of cardiac disease are present. The ability thus to group together a large collection of cases illustrative of the stages, varieties, and phases of different diseases, is one of the great advantages of so large a hospital as this, adding immensely to the efficiency of didactic teaching. I shall again offer you the opportunity of examining these cases of valvular lesions, in order to review the differential characters of the murmurs, and to study an application of auscultation in such cases, of which I shall now proceed to speak.

I have been careful to state, in the two preceding lectures, that the murmurs which we have considered, important as they are by enabling us to localize lesions and determine, to some extent, their character, do not afford us much, if any, information respecting the gravity of the lesions which they represent. They do not enable us to form an opinion as to the amount of contraction of the orifices, as to the extent of valvular insufficiency, or even as to the existence of either contraction or insufficiency in certain cases. Let it always be borne in mind that we are never to judge of the importance of valvular lesions by the quality, or pitch, or intensity of existing murmurs. Is there no mode by which information may be obtained respecting the damage occasioned by these lesions? There is a mode, and it constitutes a beautiful application of auscultation. The mode to which I refer has reference to the heart-sounds; and, in order to prepare you to understand this application of auscultation, I must ask your attention to certain facts concerning the second sound of the heart in health.

The second sound of the heart we have seen in a previous lecture to be produced by the sudden forcible expansion of the segments of the aortic and pulmonic valves. The three segments at each of the two arterial orifices expand synchronously, and combine to form the second sound. A portion of this sound thus comes from the aortic, and a portion from the pulmonic orifice. Now, the aortic sound and the pulmonic sound may be separated from each other, and each observed separately. Let me explain how this is done.

In my first lecture, on the anatomical relations of the heart, I pointed out the relative course and situation of the aortic and the pulmonic artery. I have delineated these two vessels as they proceed from the heart, on the chest of the living subject now before you. Observe the aorta, at the point where the arch begins, is situated at a point corresponding to the second intercostal space on the right side close to the sternum. At this point it is most accessible. Were I to introduce a small knife in the second intercostal space close to the right margin of the sternum, and incline the point a little under the sternum, I should open the aorta. Now, if you place the stethoscope over this point, and the pectoral extremity of the instrument be not too large, you hear that portion of the second sound of the heart which is produced by the expansion of the aortic segments alone.

Observe that the pulmonic artery, as it leaves the heart, is deflected a little to the left; and observe that at the point where it goes backwards to subdivide, it is situated at the second intercostal space, on the left side, near the sternum. Here this artery is most accessible. A small knife introduced into the chest at this point, would open that artery. Now, the stethoscope placed over this point conducts that portion of the second sound of the heart which is produced by the pulmonic segments alone.

We have then an aortic and a pulmonic sound, combined in the second sound of the heart, and it is practicable to discriminate them in the way just described. What proof is there that this is practicable? The second sound of the heart, as heard in the two situations just mentioned, is not one sound, but two different sounds; that is, the second sound of the heart in these two situations is found to present differences in intensity, quality, and pitch, which show that the sound in each situation emanates from a different source; and, in view of the relations of the two vessels to the thoracic walls, it is fair to conclude that the sound on the left side of the sternum comes from the pulmonic, and that on the right side comes from the aortic orifice.

We may, therefore, distinguish the sound on the left side as the pulmonic, and that on the right side as the aortic second sound. What are the different characters which belong to the aortic and the pulmonic second sound of the heart? I will enumerate them and ask you to verify them for yourselves, by examining healthy persons with reference to this point. The aortic second sound is louder than the pulmonic; it is higher in pitch; it is apparently nearer the ear; it is shorter, and the valvular or clicking quality is more marked. *Per contra*, the pulmonic second sound is less intense than the aortic; it is lower in pitch; it is apparently more distant; it is longer, and the valvular or clicking quality is less marked. These differential characters are more apparent in some persons than in others, but you may easily satisfy yourselves of their correctness. The only character of importance to be recollected with reference to

the study of the two sounds in disease, is the intensity—the pulmonic is less intense than the aortic. The other characters are only important as proving the existence of the two sounds which are combined to form the second sound of the heart.

We are now to consider how the facts just stated lead to an interesting and important application of auscultation to ascertain the amount of danger occasioned by valvular lesions. We compare, in the first place, the aortic and pulmonic sounds in order to determine whether the mitral lesions represented by mitral murmurs involve contraction or insufficiency of the mitral orifice, and if so, to what extent? An effect of mitral obstructive and regurgitant lesions is to diminish the intensity of the aortic second sound. This effect is due to the diminished quantity of blood sent from the left ventricle into the aorta with each ventricular systole. The quantity of blood is diminished in proportion to the amount of obstruction or regurgitation. This is sufficiently obvious, and in proportion as the quantity of blood sent into the aorta with each ventricular systole is diminished, the aortic second sound is weakened. Diminished intensity or weakness of the aortic second sound is then a sign that mitral lesions are either obstructive or regurgitant or both.

The weakness of the aortic second sound may render the pulmonic relatively the more intense, but this mitral disparity is increased by another effect of obstructive or regurgitant mitral lesions, viz. an increase or intensification of the pulmonic sound. How is this effect produced? Obstructive and regurgitant mitral lesions, as we have seen, lead first to enlargement of the left auricle, next to pulmonary congestion, and next to hypertrophy of the right ventricle. Now, when they have induced the latter effect viz. hypertrophy of the right ventricle, the blood is propelled from this ventricular cavity into the pulmonic artery in larger quantity and with more force than in health. Moreover, owing to the distension of the left auricle there is an obstacle to the free passage of blood through the pulmonary circuit. The consequence is, the valves of the pulmonic artery are dilated with abnormal force; the force of the recoil is proportionately increased, and the pulmonic second sound is intensified.

Weakening of the aortic, and intensification of the pulmonic second sound, are thus effects of obstruction and regurgitation arising from mitral lesions. We can readily ascertain these effects by comparing, by means of auscultation, the aortic and the pulmonic sound. We listen to the second sound of the beat successively in the second intercostal spaces on the right and left side of the sternum, and we find the pulmonic sound to preponderate over the aortic in intensity, more or less, according to the diminished quantity of blood sent into the aortic, and the amount of hypertrophy of the right ventricle. The greater relative intensity of the pulmonic sound becomes a criterion of the amount of either obstruction or regurgitation, or of both, incidental to mitral lesions. For this truly beautiful application of auscultation we are indebted to Skoda, of Vienna. I shall give you an opportunity of making the application in the cases of mitral lesions now in hospital.

A similar comparison of the aortic and pulmonic second sound is applicable, for the same end, in cases of aortic lesions. Suppose we find, on examining a patient, the aortic direct murmur. This murmur may be due to lesions which occasion more or less obstruction, or it may be due to lesions which are innocuous, or, again, as we shall presently see, it may exist without any lesions whatever. The characters of the murmur give us no definite information respecting the conditions on which it is dependent. An aortic regurgitant murmur shows regurgitation, but the murmur gives no definite information as to the amount of regurgitation; the regurgitant amount may be small or large. Now, it is desirable to know whether the lesions situated at this orifice are of a nature to impair, to a greater or less extent, the aortic valve. Does this valve fulfil its function, and, if not, is it damaged much or little? A comparison of the aortic and pulmonic second sound affords us information with respect to this point. If the valvular segments are not affected, the aortic sound is not weakened, but preserves its normal predominance over the pulmonic. But if, on the other hand, the segments are more or less damaged, the aortic sound is proportionably weakened, and the pulmonic sound becomes, relatively, more intense. The morbid disparity is due, in this case, altogether to weakening of the aortic, and not to an intensification of the pulmonic sound, as in the case of mitral lesions. This is one useful application of the comparison of the two components of the second sound, and our cases at the hospital will also afford practical illustrations of which you will have the opportunity of availing yourselves.

The remainder of this lecture, gentlemen, I shall devote to an important subject connected with the cardiac murmurs. We have thus far considered murmurs which represent organic lesions of the valves or orifices of the heart. But, as I have intimated already more than once, an endocardial murmur may exist without any organic lesions. An abnormal condition of the blood may give rise to a murmur, the valves, the orifices, and the heart, in every respect, being perfectly sound. Such a murmur is distinguished from the murmurs due to lesions of some kind, as an *inorganic murmur*; or, since an inorganic murmur depends on some blood-change generally connected with anæmia, it is often called an *anœmic murmur*. It is also called a *hæmic murmur*. You will, perhaps, imagine that the occurrence of murmur without lesions, must give rise to difficulty and confusion in discriminating an inorganic murmur from those which are due to lesions; the latter, by the way, are distinguished as *organic murmurs*. The discrimination involves less difficulty than you may imagine, and, practically, the occurrence of inorganic murmur occasions no serious inconvenience in diagnosis.

Let me proceed at once to give an account of murmurs which may be produced without lesions. A mitral direct murmur may occur without any *mitral* lesions. I am not aware that any one before me has pointed out this fact. I know it to be a fact. I have met with two examples of this murmur, well marked, in cases in which examinations after death showed the mitral valve and orifice to be entirely free from lesions. In both these cases, however, there were aortic lesions involving insufficiency, and dilatation of the left ventricle. So far as my experience goes, therefore, the mitral direct murmur may exist without *mitral* lesions, but not without aortic lesions. I was at first at a loss how to explain the fact just stated, but reflection on the subject has led to an explanation which is to my mind satisfactory. It is as follows:—Distension of the ventricles with liquid causes the valvular curtains to float towards the orifices and to come into apposition. In fact, experiment shows that the auricular valves may be closed by injecting a liquid into the ventricles from the auricles. This experiment has already been made before you by the professor of physiology. Now, in cases of aortic regurgitant lesions, the left ventricle is already filled with blood by the regurgitant current at the instant when the mitral direct current takes place; and as a consequence, the valvular curtains are already in apposition. Hence, the mitral direct current throws the curtains into vibration, and the murmur is produced. The mitral direct murmur, under these circumstances, and indeed generally, has a peculiar character, due, as I suppose, to the fact that it is produced by vibration of the valvular curtains, and resembling the sound caused by permitting the lips to be thrown into sonorous vibrations with the expired breath.

Let me here make an incidental remark with reference to the valvular element of the first sound of the heart. In speaking of the mechanism of the production of this element in a previous lecture, I was careful to say that it was due to the sudden *tension* of the auricular valves. I did not say the *expansion* of these valves. This element of the first sound is considerably weaker than the second sound of the heart. Whenever we eliminate from the first sound the element of impulsion, the second sound becomes the more

intense of the two. The second sound is propagated further from the præcordia than the first sound, because the valvular element of the first sound alone is propagated even for a short distance; the element of impulsion extends but little beyond the præcordia. These clinical facts appeared to me for some time quite inexplicable; but they are now to my miud explicable. The element of impulsion being due to the movements of the apex against the thoracic valves, is limited to the præcordia for the same reason that, as we shall hereafter see, a morbid friction sound is thus limited: and the relative feebleness of the valvular element of the first sound, as compared with the second sound, is due to the fact that the mitral and tricuspid curtains are already floated out and in apposition when the ventricles contract. The blood in the ventricles, when the ventricular systole takes place, does not expand the curtains protecting the auricular curtains—they are already expanded—but they are simply made tense: hence, the sound produced is weaker than the second sound of the heart, notwithstanding the aortic and pulmonic segments are much smaller than the mitral and tricuspid curtains.

To return to the consideration of inorganic murmurs. A mitral regurgitant murmur, and an aortic regurgitant murmur, are never inorganic; the occurrence of regurgitation at these orifices, of course, involves lesions which render the valves more or less insufficient. It is never a question when these murmurs are present, whether they are organic or inorganic. Thus the question, whether an existing murmur be organic or inorganic (exclusive of the mitral direct murmur), relates only to the aortic direct murmur. An aortic direct murmur may be either organic or inorganic. It is determinable in individual cases, whether this murmur be organic or inorganic? In general, this discrimination may be made; but it must be confessed that sometimes it is difficult, and even impossible. Does not the liability, in certain cases, to confound the two murmurs, impair the value of the organic murmur as a sign of aortic lesions? It does not; because, in the cases in which it is difficult or impossible to determine whether the murmur be organic or inorganic, it is of very little practical consequence to make the discrimination. Let me explain this statement:—

If an aortic direct murmur exist in a case in which the heart is found to be enlarged; if it be associated with an aortic regurgitant murmur; if the aortic second sound be impaired, the aortic direct murmur is in all probability organic—aortic lesions are present. But if the murmur exist in a case in which the heart is not enlarged; if an aortic regurgitant murmur be not present; and if the aortic second sound be not impaired, the murmur may be either organic or inorganic; and it is of little practical consequence to determine whether it be organic or inorganic, for, if it be organic, the lesions which give rise to it are innocuous. In other words, whenever the lesions giving rise to an aortic direct murmur are of immediate importance, the heart is more or less enlarged; or an aortic regurgitant murmur coexists; or the aortic second sound is more or less impaired.

In most cases, however, we are able to decide that an aortic direct murmur is inorganic. What are the circumstances which go to show that it is inorganic? I will enumerate the most important. And, first, I have already mentioned three important negative circumstances, viz. absence of cardiac enlargement, of an aortic regurgitant murmur, and of diminished intensity of the aortic second sound. These negative circumstances are to be considered as rendering it probable that the murmur is inorganic.

The existence of anæmia is another circumstance. Inorganic murmurs are generally associated with the obvious appearances of anæmia, viz. pallor of the prolabia and face. Anæmia, however, may exist without marked pallor, and, on the other hand, the murmur is found only in a certain proportion of the cases of well marked anæmia.

An inorganic aortic direct murmur is apt to be associated with an inorganic *pulmonic* direct murmur. We recognise the existence of a murmur in each vessel by disparity as regards pitch and quality. The coexistence of the two murmurs is a circumstance rendering it probable that the aortic direct murmur is inorganic; that both murmurs are due to the same blood-change. I may remark here that a pulmonic direct inorganic murmur not very unfrequently exists without an aortic direct inorganic murmur.

An inorganic murmur is generally soft; yet it is sometimes rough. Roughness, undoubtedly, renders it probable that the murmur is organic. A more important circumstance is the fluctuating character of the murmur. An inorganic murmur varies in intensity at different times, and may be sometimes wanting. An organic murmur is more uniform in intensity, and is almost always uniformly present.

In the cases in which an aortic direct murmur is inorganic, murmurs in the different arteries are generally found—in the carotids, the subclavian, etc. The same blood-change which occasions a murmur at the aortic orifice, gives rise to these arterial murmurs. It is generally easy to determine that the latter are produced within the arteries, not transmitted from the aortic orifice, by differences as regards pitch, and sometimes as regards quality.

Finally, certain cases in which an inorganic aortic direct murmur exists, are characterized by the coexistence of a murmur in the cervical veins. The murmur in the veins is a continuous humming sound, generally known as the *venous hum*. The French term it the *bruit de diable*, but by this title no disrespect is intended to his Satanic majesty. The devil in French is a child's toy—the humming-top—to the sound of which this murmur often bears a close resemblance. The murmur is sometimes loud and musical. It is heard on the right side of the neck oftener than on the left, and is frequently heard only when the patient is sitting or standing, not in the recumbent posture. For its production it is generally necessary that the stethoscope should be applied over the veins of the neck with a certain amount of pressure.

The venous hum was for some time supposed to emanate from the arteries of the neck. Some of the French observers still consider it an arterial murmur. That it is venous may be shown by a very simple procedure. In a case presenting the murmur, slight pressure above the situation where the stethoscope is placed, will cause an immediate suspension of the murmur, which reappears the instant the pressure is removed. It may thus be made to come and go by making and removing the pressure of the finger.

The venous hum is dependent on the same blood-change which occasions arterial murmurs, and an inorganic aortic direct murmur. It coexists often with a carotid murmur, and the latter continues when the venous hum is suspended by pressure above the stethoscope. Its coexistence with an aortic direct murmur is a point in evidence of the latter being inorganic.

Army Medical School.—The winter session of the Army Medical School, at Fort Pitt, Chatham, was opened on Wednesday, October 1, when the whole of the students belouging to the school attended in the lecture room. The introductory address was delivered by Professor Parkes. By direction of the War Office authorities the course of study at this school, during the present season, is to be confined exclusively to the junior assistant surgeons of the army. On Wednesday, twenty-seven medical candidates for commissions, and six assistant surgeons, joined the establishment to go through a course of medical instruction. —*Brit. Jour.*

The alkaline treatment of acute rheumatism appears hitherto to have been untried in France. M. Jacond, of Hôpital Beaujon, has, however, tried it in six cases, and pronounced himself satisfied with his attempt. "On the third day, the fever was diminished, the pulse was lowered, and the temperature of the body nearer the normal; but the most striking phenomenon was the rapid diminution, not the disappearance, of the pain."—*Brit. Jour.*

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Continued from* p. 238.)

In thirty-four uncomplicated cases, it was pale in 17; of sherry or high color in 7, in two of which very red; and of natural color in 10. In these cases it was often turbid, whether pale or high-colored. In twenty-three cases of heart complications, first examinations, it was of high color in 12; pale in 6; natural in 4; and smoky in 1. It was often turbid. In four cases of cirrhosis it was red, apparently with purpurine in 3; rather pale in 1. In four cases of phthisis it was three times high-colored, and once pale. In two cases of paraplegia it was about natural. In two cases of acute mania it was natural in one, and of a brown color in the other.

The examinations reported here, with the exception of the few which were repetitions after a few days, were all first examinations, and in most cases were made anterior to any treatment.

Albumen was found in quantity varying from a mere trace to sufficient to solidify the fluid 85 times in these 108 observations. *In twenty, casts were found, but no albumen.* In two neither casts nor albumen could be discovered; and in fourteen, casts could not be found, although the urine was albuminous. In one, there were albumen and fatty cells; and in one, fatty cells without casts or albumen. As to the *character of the casts*, in forty-two instances hyaline, or perfectly smooth and transparent casts were found. In just one half of these cases the hyaline casts only were found, while in the other half they were associated with granular and fatty casts, chiefly the former. Granular casts were found in forty-one; fatty in fourteen. Many of the latter were also granular. Nuclei were found attached to the hyaline, or oftener to the granular casts, in seventeen; granular or fatty cells much more rarely. Blood casts were noticed five times, and invaginated casts three times.

In twenty of the cases of heart disease, the character of the casts was as follows, viz. hyaline only, 1; granular only, 6; fatty only, 2; hyaline and granular (finely granular) in the same specimen, 9; granular and fatty, 1; hyaline, granular and fatty, 1. In two of the cases of heart disease albumen was not found.

As to the cases in which albumen existed and no casts were found, it is proper to say that often in office and consultation practice there is not an opportunity to make repeated examinations. The patient lives, perhaps, at a distance, and spends but a day or two in town; or a consultation in town is called once, and is not repeated. Then again, the specimens sent are not always the most favorable to a correct knowledge of all the facts. When the secretion has been standing for some time in a vessel, and a pellicle is filled from the surface fluid, the sedimentary matters, including the casts, may have subsided sufficiently to be all left behind. It occasionally happens that the specific gravity of the urine and of the casts is so nearly the same, that the latter will not subside for days, and in that time alkaline decomposition has perhaps occurred, which loads the sediment with phosphates and vibriones, and so renders the discovery of casts very difficult, if not impossible. These negative results then must be received with hesitation when albuminous urine and the symptoms furnish the means of diagnosis. The instances in which these casts were not found were as follows:—Two were cases of acute albuminuria, and both, as far as is known, recovered; six had confirmed Bright's disease, and died of it; one has Bright's disease, but still survives; and of five, the subsequent history is not known.

Regarding the *absence of albumen, and the presence of casts.* This is to be looked for chiefly when the kidney is contracted; but it is well known that in the other variety, albumen often disappears in the course of the treatment to appear again at a later period. Whether in such cases the casts are still recognisable I cannot now say. I have neglected to make notes on that point, and am not willing to trust to memory alone in the attempt to establish a rule. Regarding the twenty cases referred to above, they were instances in which albumen had not, so far as is known, existed at any time. In most of them the examination was repeated many times, and the patients kept under observation for months, some of them for years. In a few a little albumen could sometimes be found, oftener in the last weeks of life. The casts were, in all, either of the hyaline or granular variety, though in some they were coarsely granular. As bearing on the question raised in the earlier part of this discussion, whether such casts under such circumstances are an indication of Bright's disease, I will state all that I know relating to the subsequent history of these cases.

Observed during the last five months, none yet showing any unequivocal signs of Bright's disease,	5
Observed in the last four years, all dead, all giving evidence of Bright's disease before death, diagnosis confirmed by autopsy in two only,	8
Observed in 1838, April and May, paraplegia and cystitis, recovered, but has died within a short time, it is said of spinal disease, not seen by me since Aug. 1858,	1
Occurred with acute mania, two, and two and a half years ago, albumen disappeared with that disease, both now in ordinary health,	2
Noticed three and a half years ago with periodical neuralgia, no other sign of Bright's disease since,	1
Noticed in January, 1858, both having oxaluria, and one moderate heart disease, no other sign of Bright's disease since,	2
Noticed in April, 1859, paraplegia, no other signs of Bright's disease since,	1

Here there are six instances in which casts, hyaline and granular (finely granular), three with nuclei attached, have been noticed, and in a period of two to four years afterwards no other sign of kidney disorganization has appeared, while in eight other persons, presenting at first the same indication, and as far as relates to the urine nothing else, Bright's disease existed and proved fatal in the same period. But it is proper to add that among the fatal cases three had disease of the heart, and two had cirrhosis at the time the examination of the urine was first made.

The *sedimentary matters* found in albuminous urine, beside the casts, are very variable, and with two or three exceptions seem to be of but little importance. Blood was found nineteen times; kidney cells, mostly fatty, a few granular, fourteen times; pus usually in small quantity, forty-six times, in males thirty-four, and in females fourteen; nuclei of the kidney cells, healthy or granular, often. These have their significance. The less important matters were, oxalate of lime in 26; spores of penicillium glaucum in 24 (often this and the oxalate of lime concurring); uric acid in 20; urate of ammonia, amorphous, in 13; vaginal epithelium from nearly all the adult female patients; mucus, very commonly; healthy or effete bladder cells, often; organic globules, large or small, pretty frequently; columnar epithelium, tube casts of oxalate of lime, and sarcina each once. The urine was acid in all the specimens, except one, and that contained casts, phosphates, and pus, from paraplegia and cystitis.

Hæmatoidine was found in forty-eight of these cases, usually in scales, a few times only in granules, often very abundant. I have been led to attach some importance to the presence of this substance, as an indication of congestive action. It is often produced by other diseases of the kidney, or may originate in the bladder, but its occurrence in nearly half the cases of Bright's disease is worthy of notice.

The usual tests of albumen, heat and nitric acid, have not been absolutely uniform in their action. It often happens that in alkaline urine, heat will not precipitate the albumen, but when the secretion is acid, we rely on it with confidence. Mrs. J. had disease of the heart, pleurisy with scrous effusion, and extensive anasarca. Her urine was often examined and always contained casts and albumen, manifest to the usual tests, except on one occasion; then, although it was acid as usual, it was perfectly transparent after it had been boiled, and equally so after the addition of nitric acid, until it had stood a long time; at length albumen appeared in a very copious precipitate in that treated by nitric acid. After that it behaved again as albuminous urine usually does. The urine of Mr. A. F. (having cardiac disease) was examined Sept. 22d, and gave decided reaction both to heat and nitric acid. It also contained casts with nuclei attached. On the 30th it still contained casts, hyaline and granular, and was acid; but neither heat nor nitric acid in the cold urine could detect the least trace of albumen, but nitric acid added to the heated urine, gave decided precipitation. In several subsequent examinations the albumen was precipitated in the usual way, by both these tests. These anomalies depend doubtless on some unusual relations of the albumen, but what these unusual relations are my chemical knowledge does not enable me to explain.

Before leaving this branch of the subject, the two cases in which neither casts nor albumen could be found, require explanation. One was pregnant, several months advanced, had had heart disease for two years or more, was much swollen with œdema, had the complexion of Bright's disease. The urine was two or three times examined, with the result above stated. I did not see her during the last weeks of her life, and do not know the state of the urine in that time. The kidneys were found after death large and white. The other case was that of a gentleman who came to town to be treated for cirrhosis and died here. His kidneys were fibrous and contracted. The urine was always high-colored and scanty, as it usually is in cirrhosis. He died about the 6th of February. From the 1st of January to the 3d of February, examinations were made repeatedly and carefully, without discovering either albumen or casts. But at the latter date, the urine having diminished to about three ounces a day, casts were found in sufficient quantity. The immediate cause of his death was secondary meningitis. In stating then that in two instances of Bright's disease, the albumen and casts were both absent, I do not wish to be understood as saying that they were absent from the beginning to the end, but that they were absent for a considerable time, and at a period when a diagnosis was called for, and in fact was made, but based on the general symptoms, and was afterwards verified.

In these remarks thus far, I have not mentioned "the gouty kidney" and "the mixed kidney." The first of these denominations has been applied to the contracted kidney. We have so little of gout in this country, that I have not had many opportunities of tracing the connexion between it and Bright's disease. That the contracted kidney is occasionally met with in persons who have been subject to attacks of gout is clearly shown. That the condition of blood which produces the gout produces also the renal disease is suspected, and it may be so. Even if it is, the small kidney is commonly found, at least in this country, in persons who have never had the gout. The term "gouty kidney" has then less title to the possession of the contracted kidney than its rival "spirit kidney." I suppose the whole truth is stated by Dr. Geo. Johnson (p. 79): "When we come to examine the condition of the kidney which is found in connexion with gout, we shall see that it differs in no respect from other instances of chronic renal disease unconnected with the gouty constitution." I may be justified then in using the term only to reject it.

In the view that I am compelled to take of renal pathology, "the mixed kidney" can hardly be treated with any more courtesy. We have seen that almost all the diseased kidneys that I have described are *mixed kidneys;* that is, the articular lesion, which in its excess determines the variety in Bright's disease, is to be found in the opposite variety in greater or less degree. A single morbid condition does not occur alone, except at the very outset of the affection, and when the variety is not clearly determinable. The phrase has currency with those who hold that the varieties are so many distinct and separate forms of disease.

There is one remark more which I wish to make, and but one, before I speak of treatment. It relates to the œdema that is observed in cardiac affections. Some surprise or rather doubt has been expressed regarding the dependence of renal on cardiac disease, as I have stated it in these remarks. I shall soon quote the observations of others on this point, or rather regarding their concurrence. I wish now to say more distinctly than I have said, that dropsies which occur in diseases of the heart do not usually occur until the urine is ready to give proofs of grave changes in the kidney. I do not say that there is no such thing as cardiac dropsy, and yet, with very few exceptions, in some years, I have not failed to find the evidence of renal disease, whenever what is called cardiac anasarca has appeared.

Mr. President, I approach the last important topic in this formidable disease with hesitation and serious misgivings. The profession have wrestled with the malady now for more than a quarter of a century, and it may be pertinently asked whether they have gained any important advantages over it. In its chronic and most common form, if the affection is ever to be ranked among the curable diseases, the appropriate treatment is yet to be discovered. I often hear physicians say that they cure it uniformly. One relies on the mercurials and believes them sovereign; another has confidence in the specific virtues of chalybeates; a third believes in diuretics, and a fourth in active catharsis. But let the too confident practitioner wait a few weeks, or months it may be, and he will find that the fire he may have slackened is not extinguished. Indeed if he will faithfully study the indications of chemistry and the microscope, his hopes will not often ripen into confidence. I cannot say that no man ever cured the disease. I cannot even say that I have not assisted in its cure, for large numbers of hospital and consultation patients have been relieved and have passed out of the reach of my observation. The worst I can say, and unfortunately the best, is, that among the chronic cases which I have been able to follow to an issue, often through years, that issue has been one and invariable; I *do not know* that I have ever radically cured a case. To palliate, to prolong life, and even to render it comfortable after it has been gravely threatened; to liberate it, for a time at least, from a load of suffering that makes it worthless, this we can often do; I think we can do it in a large majority of the cases, if we see them in the earlier stages.

To overcome those influences which are causing the disorganization of the kidneys is the first great requisite for cure. These we cannot claim that we understand sufficiently to know how to oppose them successfully. The changed condition of the kidneys is the great pathological fact; this we cannot remedy till we can remove its cause. The uræmia is the great semeiological, or perhaps I shall be excused for saying semeiogenic fact. We cannot stop the production of urea in the tissues, or prevent its entrance into the blood. We cannot force the kidneys to a complete elimination of it till we can restore them to a more healthy state, and this will be equally true whatever theory we adopt of the origin of the disease. We know of no antidote for the poisonous effects of the accumulated urea; chemistry has not suggested a neutralizer. There are other avenues, it is true, through which the poison may escape in limited quantities, but these vicarious agencies in the end prove inadequate, and are always capricious and uncertain. We can, I believe, often relieve the kidneys of their congestion, and so retard or delay the fatal lesions in them. But after all, the treatment of Bright's disease, as we now prescribe it, is little more than a treatment of its symptoms and its complications.

(To be Continued.)

ON RESECTIONS IN MILITARY SURGERY,

AT A LATE OR EARLY PERIOD OF THE WOUND.

BEING REMARKS AND FACTS ON THE PROBABILITY OF A GREATER AMOUNT OF SUCCESS IN THE LATTER.

By RUFUS KING BROWNE, M.D.,

SURGEON IN CHIEF OF U. S. GEN. HOSPITAL, DEPARTMENT OF GULF.

Whoever has the conviction, will find sufficient facts and reason to sustain it, that the results of resection in military surgery are not equally conservative of life and limb with those in civil surgery: for in the former, nearly all the conditions and circumstances pertaining to the operation vary widely from those in the latter. In these the physiology of subjects of diseases and accidents incident to bones, is not remarkably disadvantageous or unfavorable to recovery. There is absent destruction of the tissues, shock to the system, and all the grave incidents pertaining to being shot in battle. Prior to the event, too, the privation and hardships, the conditions of a loss of health and vigor, to which the soldier is subject, have disqualified his system for the play of the ordinary force and vigor in the restorative functions required to reunite the wound.

When, too, the wound is first received, the great surface it opens to the action of the air and other exterior influences, becomes at once the nisus of a most morbid and destructive activity of the reproductive or cellular elements of the rent tissues—one *which by a continued reflex action is adverse to and vitiates the various functions.* From therefore the very moment these conditions and circumstances concur, the wounded man's health is impaired and endangered; but this is not all. He cannot take the ordinary amount of food, nor can even this be properly dissolved and appropriated to *replenish* the blood—a process itself the leading one in the nourishment of the body and the normal continuance of the functions.

Moreover, with this decrease of the sum of the functions, a *slackening* of the forces of life—the suppurative process continues unabated. He lies in a hospital crowded with others in the same condition, while the therapeutical means of his recovery are necessarily not the best the resources of science present. Combined with these circumstances is that distressing malady, the ineffectual longing for home, and the terrible foreboding and dread, which the sight of frequent death in his presence causes.

But these circumstances are all absent in the case of the civilian subjected to the same operation. It is done with the greatest care and circumspection, lest it fail, and the reputation of the surgeon be impaired. In civil life, the diseases of the resectable bones, if unbroken, are generally not such as really impair the system; and in case they are broken, the wound, if any, is not usually extensive. The soft tissues are not rent and lacerated as with a destructive projectile. The wound of operation is immediately cared for, and the patient when operated on is in charge of attentive friends and surgeons anxious to all the conditions of his welfare. If it is an operation in case of disease, the soft tissues while freshly cut are brought into apposition and if it is a case of compound or comminuted fracture, with a small external wound, this is equally the case.

Such is the difference between the one and the other—a difference wide enough to sustain us in our previously expressed conviction, without mention of the general disturbance of anatomical attachment of the soft tissues to the bone by the crashing power of the ball, or the liability of the soldier to purulent infection in the hospital, both of which are, however, paramount disadvantages, from which the civil subject of resection is exempt.

But we are fully experienced in a considerable number of cases of resection of wounded bones, which led to and sustain the conviction we present. So far as we know, the largest number of resections done on wounded soldiers, in any one hospital practice, were those done at the General Hospital, Fortress Monroe. Up to the month of July, we knew of fifteen cases, seven of which we were witness to, and all but one of which we were perfectly familiar with the circumstances and results of. Of these, eleven were resections of the continuity or contiguity of the humerus, and four of the middle and upper half of the shaft of the femur. Add to these five cases performed by myself on the wounded at the battle of Baton Rouge, four of which were of the head and neck of the humerus, and one of the head and neck of the femur. Of these twenty cases four only finally recovered. None of those of the femur did so, though one was still alive when I last left the General Hospital on the third of July. Of the fifteen operations, all were done well—perhaps admirably. All of my own were done without any of the proper peculiar instruments for the operation, and were therefore imperfectly, and perhaps less expertly done than the others. One of these survived, and has so far recovered as to show that he will undoubtedly have a good arm. The first fifteen operations were done at varying periods after the receipt of the wound—that is, from a week to three weeks after suppuration had been established. Not more than four of these did favorably continuously from the day of the operation.

Of the five cases, the operation was done on the third and fifth days after the wounding, after suppuration was fully established. The successful case was the first operated upon. The operation was the single straight incision. The others were all the U incision. The former I consider the most advantageous, and there are various reasons for uniformly preferring it to any other form in resection of the head or shaft of the humerus. All the resections of the humerus in the fifteen cases were by flap incisions—some V and some U-shaped. The treatment in all these cases was the supporting bandage, kept wet, with iron and other tonics internally.

Seeing that the results of the cases vary so greatly from the well knowu large proportion of successes in resection of the same bones in civil practice, the question presents itself—Would there not be a larger proportion of successes in the former, if the operation were done while the wound is fresh or very recent? Undoubtedly where there is extensive comminution of the wound, permitting the fragments of bone to remain, increasing the amount and extent of the suppuration, we do not know what the result of an immediate resection would be. Hitherto the practice of military surgery was always to postpone for a greater or less period, operative procedure in those cases, and this for the reason that the surgeon, not considering this class of cases as requiring it at once, and not finding it *easy* to ascertain the exact extent of the wounds of the bone, left them to be *determined by time.* But this must be an inferior, if not mistaken practice, and one adverse to all accredited rules of ordinary therapeutics, which is to *do* the best *at the time* of the difficulty. It is to leave surgical interference undone, and its doing to *turn* upon the very morbid and destructive process, consecutive to wounds, which surgical interference should be the very first to avert and prevent or lessen. Perhaps this discrepancy is accounted for by the absence of any positive rules, deduced from sufficient experience, of the results of immediate resection in military surgery; and the same practice would be the case in amputations were we without rules, likewise so deduced from sufficient experience in them, for the guidance of the surgeon. But such rules for the moment of resection in the comminution of bones by gunshot wounds in soldiers, it should be our first business to settle while the opportunity lasts. Of course the case *is* as it at present stands, because in surgery as in all other branches of science, the order of departure or advancement from the doubtful is, by sufficient experience, to the positive.

In military *amputations* such rules are more or less established, and many of the reasons upon which they are sustained for *immediate* amputation, are equally forcible for immediate resection. Where the continuity of a bone is broken, or comminuted, or crushed, the amount of morbid irritation is remarkable—it cannot be exceeded—and can only be allayed by the total removal of the offending

bodies. Certainly surgeons are directed by written authorities to remove all detached fragments of bone, on the first examination; but this is very rarely more than partly done, and seldom done at all, except of minute pieces, or others which come away with but little traction on the forceps, and without requiring further detachment. I am experienced in a considerable number, perhaps many cases, where I, not being in charge of the wounded patients, pleaded for a free incisive exploration, to ascertain and to extract all the pieces completely broken from the larger remaining parts of the shaft, but it was denied. Sometimes, in cases where the suppurative and sloughing action, which they in part caused, had been established many days without abatement or sign of improvement. If at this period of the wound, however, the surgeon, up to this moment, constant to the practice of waiting, perform resection, the tissues involved can neither take part in a reparative process, nor become a part of what is saved by resection. The system itself is at the lowest grade of vigor, and in the very poorest condition to sustain the operation, besides the special infirmity consequent on the continued suppuration of the first wound. I have witnessed several such cases in which the operation at this period was followed by gangrene, and required the second operation of amputation. And it is precisely here we see the paramount disadvantages which constitute the grave difference between the civil and the military view of resection—*a difference which may be sufficient to account for the great disparity in the results of resections* in the two so far as I present them. The first, in the majority of cases, prior to the period of the operation, undergoes none of this long suppurative stage, and it was this which led me to suppose that resections in military surgery while the wound is still fresh, if well done, would turn out much more conservative than our record of cases proves. Moreover, it has always seemed to me, that where the large or larger parts of the shaft of the bone, remaining consolidated with its soft tissue, is disconnected by a complete break from a smaller piece, whether between the two there is obvious displacement or not, the latter should be removed, for it can be explained, in disproof of any objection to this, that the physiological condition of a broken bone, with this line of demarkation, at the other end of which there is an *absence* of the fragments carried away, is very different from that of a bone accidentally fractured, where, however complete, the fracture there is no *loss* of part or parts of the bone; and conversely, it seems to me that where the larger part of the shaft of the bone consolidated with its tissues, at the end where the *loss* exists, was broken off obliquely, or so as to present a large portion of its spongy portion, this need not in resection be sawed off up to a point where the natural diameter is complete, but simply rounded off.

(*To be Continued.*)

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, June 18, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. BYRNE'S PAPER ON PELVIC HÆMATOCELE.

(*Continued from page 260.*)

Dr. Barker—By the term pelvic hæmatocele is meant precisely the same as that affection styled by Simpson hæmatoma, or an extravasation of blood in the pelvic cavity. The French authors have divided it into two forms—the intraperitoneal hæmatocele, where the blood is extravasated between the wall of the uterus and the peritoneal covering, and extra-peritoneal effusion, where the infiltration of blood takes place in the cellular tissue behind the peritoneal cavity, and between the uterus and the rectum.

A great deal of discussion has taken place among the French authors as to the comparative frequency and rarity of these two forms, as to the comparative danger, and as to the comparative treatment of each. No man has ever seen a large number of cases, and hence no great deductions can be drawn from the experience of any single individual.

Now I do not propose this evening to go over the whole ground of pelvic hæmatocele, but, taking the paper of Dr. Byrne and the case which has just been read as a basis for my remark, to discuss a few points relative to its pathology, semeiology, and treatment.

As I have such a high appreciation of the paper of Dr. Byrne, I shall not hesitate to criticise it where I differ from the author. In one respect it strikes me the author is quite wrong. He regards the disease as due in a large proportion of instances to antecedent ovarian inflammation. In the course of the essay he quotes from Tilt, Ashwell, and others, who are disposed to consider ovarian inflammation very frequent, and very often the cause of pelvic hæmatocele, and I do not think I use too strong an expression when I say that he sneers at the views of Henry Bennet upon the subject, who regards ovaritis as a very rare disease. Now, I think, the difference between Henry Bennet on the one hand, and West, Ashwell, and others on the other hand, is this—Bennet writes from a careful study of the disease as it appears to him at the bedside, and not from the study of authors, or from any preconceived theories. The more enlarged my experience becomes, the more I am convinced of the truthfulness and accurateness of Bennet. I do not agree with him in everything that he says, but in most respects I find reason to accept his views. In my own observation acute inflammation of the ovaries unassociated with parturition is one of the most rare affections ever met with. I doubt very much if I have ever seen a clear well marked case, and I have been for years looking for its existence in the dead-house. I do not mean to say that it does not, or that it cannot exist; but I do say that it is of very rare occurrence. Tilt describes subacute ovaritis, and let any young medical man or medical student read his book, and he will be disposed to think that subacute ovaritis unassociated with the puerperal state is one of the most common of female diseases. In the puerperal state we may often meet this disease, but I am speaking of it unconnected with such a cause. Now, my reasons for believing that Dr. Tilt, and all the authors that have accepted his views, are wrong on this point, are these: that in very many of those cases I have seen those very symptoms which he describes as characteristic of subacute ovaritis associated with diseases of the uterus, especially of the cervix, and entirely disappear by the cure of the local lesion. But I go still further than this; I have developed that class of phenomena which Dr. Tilt considered as characterizing ovaritis by my treatment of the diseases of the cervix uteri, that is to say, in patients who have induration, etc., of the cervix requiring local applications, and where, previous to these applications, none of those symptoms referable to the ovary had existed. I have produced the symptoms to that extent that if we accept the description of that disease one would be ready to believe that ovaritis actually existed. These symptoms have all disappeared when the disease of the cervix disappeared, and when the applications were discontinued. So then I regard all these symptoms which have been characterized as belonging to subacute ovaritis in the same light as the surgeon regards the irritable testis and irritable mamma—a special form of neuralgia, if you please. It is not the definition that I should use, though I am not aware that the surgeons have told us precisely what this condition is. I consider then these symptoms of ovaritis as secondary to disease of the uterus in the vast majority of cases.

Therefore I cannot agree with Dr. Byrne in the belief that pelvic hæmatocele is almost invariably secondary to this disease of the ovary. But it is found that pelvic hæmatocele is developed in a large proportion of cases immediately in connexion with the function of menstruation; in the very large proportion of cases in connexion with the physiological congestion of the uterus and appendages. In

some rare cases it follows abortion, but it is not, properly speaking, a disease of parturition. I have studied all the reported cases very carefully, and it seems to me that that must have been a mistake in the diagnosis in relation to its connexion with parturition; I think a careful analysis of the symptoms would show this to be so. There is one reason why hæmatocele should not follow parturition, for profuse discharge of blood from the internal surface of the uterus, by emptying the vessels, would be a prophylactic of hæmatocele. It has been supposed that hæmatocele occurred from a rupture from the vessels of the ovary, that we had hæmorrhage resulting from them, and that hæmatocele was an extravasation following this. The ovary is not an excessively vascular organ, it does not possess vessels enough to give off from eight ounces to two or three pounds of blood. There are some cases of ovarian apoplexy, where blood finds its way into the tissue of the organ; we see ovarian clots in the dead-house often enough, but this is entirely distinct from hæmatocele. Although hæmatocele usually comes on immediately after menstruation, I think it due to a rupture of the vessels entirely distinct from those of the ovary. In many of the cases where an autopsy has been made the utero-ovarian vessels were found in a varicose state; in some cases where the examination has been made, it is found that there was an aneurismal enlargement of the vessels, and in a certain case, the one reported by Tilt, there was found an aneurism of the small branch of the internal iliac. But I think this is to be regarded as something different from what we are discussing.

But while I do not accept acute inflammation of the ovary as a special predisposing cause of this disease, I do think it results from some exciting active causes which produce sudden congestion and rupture of some of the vessels connected with the uterine organ or its appendages. This may be, as in some instances, a rupture resulting for instance from occlusion of the uterus, so that there is a reflux of blood from the utcrine cavity at the time of menstruation through the Fallopian tubes and fimbriated extremity, and the blood is discharged there. In a few instances the autopsy has shown this to be the explanation. In other cases the cause seems to be double. The organ becomes very much congested, an accumulation takes place in the Fallopian tubes, until one of them, distended by the formation of a clot, produces a rupture of its tissue, the blood is then gradually discharged into its nisus, either intra or sub-peritoneal, and the gradual accumulation of the clot separates it off until a large amount of effusion takes place there.

Now another point is as to the diagnosis of this disease. In the first place, the symptoms of hæmatocele come on suddenly; they occur from some exciting cause, and are produced suddenly. With all due respect to the judgment of the author, I cannot consider his first case as one of pelvic hæmatocele. If we judge it by his tests, by the symptoms he has detailed on page 13, I think the conclusion must be that it is a case of pelvic cellulitis. Now the diseases which it is necessary to distinguish from pelvic hæmatocele or which may be mistaken for pelvic hæmatocele, are in the first place pelvic cellulitis, or inflammation of the areolar tissue of the pelvic cavity. This is distinguished from pelvic hæmatocele by the following:—Cellulitis is ushered in by chills, followed by fever. It is accompanied by intense pain at the point where the effusion takes place, and forms a tumor in the pelvic cavity which is exquisitely tender and non-elastic; that is, in the first stage, but subsequently when the process of suppuration goes on, we get a distinct mark of *fluctuation*. Now all this is a process of some days' duration, during which the patient has all these symptoms which characterize acute inflammation, and subsequently those which characterize the formation of pus. But the symptoms which characterize pelvic hæmatocele are ushered in with great rapidity, and they are symptoms which do not express or represent inflammation, but hæmorrhage. There are evidences of excessive prostration—pallor, a very small and feeble pulse, and subsequently anæmia. Most generally, I have seen that it has been followed by symptoms of intense local peritonitis. The patient complains of most severe and intense pain in the pelvic region, but not the exquisite local tenderness of cellulitis. When we have a tumor resulting from inflammation of the areolar tissue of the pelvic cavity, it is exquisitely sensitive and non-elastic until we get suppuration and a distinct fluctuation, but no tenderness of the abdomen, unless it is associated with peritoneal inflammation. The tenderness on examination of this tumor is tolerable, not at all in proportion to the exquisite sensitiveness of pelvic cellulitis. This patient would allow the tumor to be raised up. Introducing my finger into the rectum, I could lift up the tumor, I could carry it forward somewhat without causing any great appearance of distress, which would not be possible in pelvic cellulitis.

I need not stop to discuss the diagnosis between pelvic hæmatocele and retroversion. It is said to have been mistaken for it. Without stopping to discuss the various symptoms of retroversion I will mention one sign which will serve to guard against any possible error—the use of the sound. If by this instrument we find the axis in its normal relation, this, exclusive of all other signs, will determine the distinction between hæmatocele and retroversion. A superficial examination might lead one to suppose retroversion to exist, because some of its symptoms are like those which usher in pelvic hæmatocele, for the patient has great difficulty for two or three days in micturition and frequent evacuations, but these are not associated with symptoms of peritoneal inflammation.

Dr. Byrne in his paper alludes to the possibility of mistaking this disease for dislocated tumors, fibrous tumors, and extra-uterine fœtation, but I think the antecedent history and the want of the explosion of symptoms will be sufficient to make the diagnosis very clear. I have recently seen a case of cancerous disease in the pelvis which, in its physical signs, resembles hæmatocele. This is not included as being a pathological condition which might possibly be mistaken for that disease. I have seen but three cases of carcinoma of the colloid form in the pelvic cavity. Of these three cases two died very rapidly within two months. The last case I have seen in consultation with Dr. Buck and Dr. Linsly, where the symptoms commenced six weeks since. In that case there is a soft elastic tumor not connected anteriorly with the uterus, but connected posteriorly to the organ and laterally. The sensation of examining the tumor was very like the sensation given by pelvic hæmatocele, but the patient is some fifty-four or fifty-five years of age, and no case of hæmatocele as yet has been reported, that I have seen, when the patient has passed through menstrual life, except in the instance alluded to—rupture of an aneurism, which should rather be considered a surgical lesion. Then again the development of the disease is not by the explosion of the symptoms of collapse and anæmia followed by intense peritoneal inflammation, but it has been accomplished throughout without pain but with marked cancerous cachexia.

As to some of the exciting causes, I have already spoken of menstruation as being the predisposing, as most of the cases have occurred in connexion with the catamenial period. Of the exciting causes excessive coition has been mentioned as one, excessive shock or cold, injuries, falls, or miscarriages, or excessive constipation. For instance, this patient, whose case is reported to-night, says that she had a miscarriage at two weeks. She had gone two weeks over her usual catamenial period, and she believed she had miscarriage, because a substance somewhat like a fleshy piece escaped from the vagina unattended with pain. When the symptoms came on, she was moving. After very careful questioning, I believe she had no miscarriage at all, and that the substance was probably a coagulum which passed from the uterus at the time the effusion took place; but still this cannot be definitely determined.

In a patient whom I saw in her first confinement, and

who afterwards moved to Astoria, and who suffered some time from chronic metritis, this explosion of symptoms belonging to hæmatocele took place. She was at the time under the care of my friend Dr. Trask, and I need not say to any who have read his papers, that he is a most careful investigator and one of the best analytical minds in the profession. He had never seen a case of hæmatocele, and is disposed to doubt whether there is one. This patient was taken, after using an injection of cold water, with symptoms of intense pain of the peritoneum, followed by great tympanitis, and by profuse hæmorrhage from the uterus. By profuse I mean a sudden discharge, although the aggregate amount was not great; but it was followed by excessive collapse, so that for days, and I visited the case sometimes twice a day, it was doubtful whether she could live from one hour to another. There was great difficulty in evacuating her bowels, and her bladder was in a condition to require the use of the catheter. Peritonitis was quite intense, and a tumor was developed behind the pelvic cavity which lasted many months, when pus formed and discharged. Dr. Trask from this circumstance was disposed to think that we had an abscess of the posterior wall of the uterus. In reference to this disease, I need not say that, unassociated with parturition, it is even more rare than ovaritis.

Another case which came under my observation, occurred in a young lady, nineteen years of age. She went to a ball just as menstruation was commencing, and danced nearly all the night. Residing only two and a half blocks from the place of the ball, she walked home in thin slippers, at a very late hour in the night or a very early hour in the morning. About five o'clock the same morning she was taken with intense pain and prostration following some discharge of blood from the uterus. Death occurred on the third day. I saw her in consultation on the second day, when the existence of an elastic tumor behind the uterus was clearly made out, and the concurrent symptoms left no doubt in my mind as to the nature of the case.

Another case which I visited was in consultation with a gentleman I see present. The patient was married first at the age of eighteen, and a year after her husband died of phthisis. At the age of twenty-three she married a second time, and the third night after she was taken with the symptoms of a profuse discharge of blood. In this case, in which there was excessive prostration, nausea, faintness, and vomiting, which kept up for several days with coldness of the surface, very rapid and feeble pulse, and intense abdominal pain, there was a large tumor formed in the pelvic cavity, and after she had been under observation for several months she was eventually cured.

(To be Continued.)

NEW YORK COUNTY MEDICAL SOCIETY.

ALFRED UNDERHILL, M.D., PRESIDENT.

Reported by Guido Furman, M.D., Secretary.

A STATED Meeting of this society was held on Monday evening, the 3d instant, at the College of Physicians and Surgeons. The meeting was an interesting one, and well attended. Prior to commencing business, Dr. Alfred Underhill, the newly elected President, delivered the following inaugural address:—

Gentlemen of the New York County Medical Society:—Having been elected your presiding officer for the ensuing year, you will credit me when I say that I have not the vanity to think this manifestation of respect emanates from any special merit of my own, for a position once held by so many distinguished gentlemen who have preceded me, such as Romayne, its first president, as Hosack, Beck, Johnston, and others, of the highest grade in our profession, but as being wholly complimentary on your part; you will therefore allow me to express to you my sincere thanks for the honor conferred upon me. And at the same time, gentlemen, I would congratulate you upon the measured success which has already followed your efforts of the last two years to resuscitate this society from a state of desuetude and feebleness of several years' duration, to that of activity and usefulness.

The New York County Medical Society is one of the old institutions of New York; it has had an existence of more than half a century, during which long period its history has been, like everything of human invention, of varied and chequered fortune; sometimes all buoyant with successful effort; sometimes struggling for its very existance, as in these latter days, when in the fostering hands of your retiring president it has been warmed into life again, and is, we trust, still to go on increasing in reputation until it shall compare favorably with any period of its brightest prosperity.

In the earliest act of incorporation by the legislature we find it stated that, among other objects to be attained besides the regulating the practice of Physic and Surgery, was the contributing to and disseminating the knowledge of the healing art. At this day, societies for various purposes exist in large numbers in every direction and in every land; the principle of association or combination of individuals for mutual advantage, common to them all, is not of modern origin, but may be traced back for many centuries; it now, however, has a more general adaptation to the wants of mankind than at any former period, it is adopted in all civilized communities, and in almost every pursuit of life; we see this exemplified in banking institutions and other corporations, in trade and commerce, in benevolent societies, and in institutions of learning. Upon this principle of association, which has been found so potent for good to masses of men, this society was established, and, without doubt, if its members had continued to give to its legitimate claims a fair degree of their efforts, in place of making it an arena for cliqueism, for violent debate and invective, and, indeed, for almost all purposes than that of medicine proper, causing a large majority of its members to shun its halls, and even an aversion to its very name—it would have escaped that long sleep of suspended animation from which it has just awakened, and at this day have been honored as the first in character and influence in our city in medical and surgical science.

But now the thick mists and clouds which have so long enveloped it are passing away, and we have fairly entered upon what we may hope is a new epoch in its history; and although its meetings are attended by a limited number of its long list of members, the greater part of whom have become interested in other kindred associations, there are those among us who will labor and study for its interest and success.

The present time is one of fearful and momentous concern, both to our whole country and to ourselves as medical men—a time when all the power of this government is brought into the most active operation to put down a rebellion unexampled in the history of the world—when immense armies, such as have been never before gathered, are fighting to save intact our beloved Union—when our own profession have gone forth nobly with our bravest and best at the call of their country, willing to take their chance of danger, either in the camp or in the hospital, upon the ensanguined battle-field or in the deadly marshes of a Chickahominy, to exert its saving skill upon all that the miasm, the sword, or the cannon may have spared. And, to the everlasting honor of the government be it said, they *have made no compact with quackery* in any of its forms, for they have received none but the regular and properly qualified into the national service. We say, then, in a time like the present, when anxiety, fear, and terror, by night and by day, are the portion of thousands of swelling bosoms in our land, it well becomes us, who are secure in our pursuits, to be diligent and untiring in our efforts to improve our science, that all may be mutually benefited and go forth better armed for the responsible duties we are called upon to perform.

For the accomplishment of these objects it is confidently hoped that our members generally will present to the society an offering, be it great or small, which will accu-

mulate in a common fund of medical knowledge for the good of all, being well assured that every jewel added to its crown will reflect its lustre back again upon themselves. It is likewise expected that we shall have a paper read at each stated meeting eliciting discussion; that the reports of the several committees will be regularly made, and that cases of interest will be related, calling forth the remarks and experience of members. With proceedings of this character faithfully carried out, it is believed our meetings will be of such interest that they will command a regular and large attendance. It now rests with yourselves, gentlemen, how far this work may prosper; and succeed it will, we doubt not, for we are rapidly adding to our working numbers, both the young and ardent, and also the tried and honored of our profession.

American Medical Times.

SATURDAY, NOVEMBER 15, 1862.

THE PROSPECT OF HEALTH-REFORM IN NEW YORK.

The friends of improvement in the health-regulations of our city are again asking the question, "What are the prospects of sanitary reform in New York?" It is not to be denied that they are most discouraging. The defeat of the health bill last year, through the defection of one of its former friends and advocates, and that at a moment when the long contest was about to be decided in its favor, was perfectly disheartening. This ungenerous and unpatriotic act of a high official, whose alliance with a corrupt and mercenary opposition at the last moment was not contemplated, unnerved the stoutest heart. Many have been led to believe that all subsequent efforts would, in a similar manner, prove abortive, and have counselled an indefinite abandonment of all measures for obtaining the requisite legislation until some fortuitous circumstance should give us an incorruptible legislature.

Meantime, thousands of our citizens are annually dying from diseases which this reform would remove; our streets are reeking the live-long year with accumulating and unremoved filth; the poor and laboring people live in underground rooms, never cheered by the sun's rays, or in tenement houses, uninhabitable except by human beings who have never known what it was to breathe fresh air. Quarantine, managed for the pecuniary benefit of the few, is become a formidable obstruction to commerce, but a ready method of introducing epidemic diseases directly to the city. Disease of every form and variety stalks abroad, unchecked and unrestrained by the ignorant and corrupt officials who disgrace the health department. In every respect the need of sanitary reform is more pressing and more apparent. And yet, at this critical period, we find many disposed to yield the struggle, and cease all agitation of the subject, at least for the present.

We should not, however, lose sight of the fact that we are striving to accomplish a reform which in importance and in magnitude rises superior to all civil, social, religious, or political questions of the times. It aims to incorporate the higher elements of a Christian civilization in the administration of our civil affairs. Fully developed, and exercising their influence without restraint, the reformatory measures to which they seek to give the binding force of legislative enactments, become of vast consequence to the State. This is true in a threefold sense. First, they will greatly lengthen the average of human life by protecting the citizen, and especially the laboring classes, from the local causes of disease. Sanitary science directing municipal authority, with one hand vigilantly guards the approaches of foreign pestilence, and with the other carefully removes from the domicil every source of endemic disease. In many cities in the old world, and in some in the new, this fact is strikingly demonstrated. The average of human life has been lengthened in Paris, in London, in Liverpool, and other populous towns where stringent health regulations have been efficiently carried out. Second, these health reforms tend to develop a strong and healthy generation of citizens. They provide well ventilated dwellings, they remove all local influences which debilitate and deteriorate, or which stifle the growth of the young, finally they protect the unsuspecting against adulterated and improper foods and drinks. Thirdly, All health reformers add largely to the sum of human happiness. They make happy homes, and from this springs that greatest of all public virtues, domestic contentment. In this estimate we should take into consideration the innumerable blessings, social, civil, and religious, which flow from a home where ruddy health glows upon every cheek. The cheerful and social family circle adds to the community citizens having correct and intelligent views of their civil and religious obligations, with a conscientious determination to fulfil them.

We have recalled these more prominent points in health reform, believing that too often its friends are inclined to regard it as a mere political question, which is to be urged forward or abandoned according to the political complexion of the State Government. It should be placed on a higher footing. It appeals for support alike to all classes and conditions of society, and every member of the community should be made to feel an individual interest in the success of a measure which brings good to the most humble as well as the most exalted. The work of sanitary reform, like all great public improvements, has this disadvantage. It must be undertaken as an enterprise, the benefits of which are first to be experienced before they can become popular. But its advocates have this encouragement, that it is a reform that never takes a retrograde step. Whatever is secured in the enlightenment of the people, or in the inauguration of positive legal enactments, is never lost.

We are not advised as to the course which the friends of the health bill will pursue during the approaching session of the Legislature. We trust it will be pressed upon the attention of our State Government with as much vigor as in former years. In no other way can we retain the influence which was gradually accumulated in its favor through years of discussion. The public mind is now very well informed of its principles, and a firm conviction of its necessity is now widespread, both in this city and throughout the State. That conviction is the result of agitation, and agitation should not for a moment be intermitted. Much is lost by the long interval of silence between the sessions of the Legislature. All might be lost that has been gained if a whole year should elapse without any agitation of the subject. It is true that we are liable to disappointment while the Senate contains such members as Abbott, Truman, and Robertson, and while the Mayoralty of the city is filled by an Opdyke, but this fact does not change the nature of our

obligations to the public. Fully impressed with the importance of sanitary reform, we are bound to urge it forward at all times or by every means in our power. If the prospect of success is not so great as last year we ought to put forth increased energy instead of relaxing our efforts.

THE WEEK.

The danger of allowing persons who exhibit mental aberration to go unrestrained in households, is frequently exemplified in the occurrence of fearful crimes. Several cases have recently been reported of the wholesale murder of children by parents, and on judicial investigation the murderer has been found to have exhibited symptoms of insanity previously to the deed. During the past week a case of suicide was published in the city papers, which illustrates the same fact. It appears that the criminal, a young man of previous good character and habits, had been heard by several members of his family to remark that the time had come for him to die. No serious importance, however, was attached to the remark, until the Friday afternoon preceding his death, at which time his conduct became so wild and strange, that his friends became suspicious that he was not in his right mind. He kept continually repeating the remark that his hour had come, and took leave of his friends. He then proceeded to an adjoining room, procured a razor in spite of the efforts of his mother to prevent him, and cut his throat so effectually as to cause almost instant death. These frequent and fearful tragedies, performed by unrecognised lunatics, deserve more consideration than is given to them by a Coroner's jury. The community should be awakened to the fact that mental aberration, however slight, requires even more prompt attention from the physician than the diseases of any given organ of the body. A contemporary adds:—"Let the public learn to look upon lunacy as a disease to which they are as much exposed as to maladies of the lungs, of the heart, or the bowels; let them learn to apply to a physician when they observe strange alterations in the ordinary mental functions of an individual, as readily as they seek his help for changes experienced in the bodily functions; and we shall presently see a diminution of those sad, those horrible murders, which are the direct result of a *diseased mind—of lunacy*."

—

The non-appearance of yellow fever at New Orleans, and its appearance in other Southern cities, would seem to prove the value of cleanliness in the prevention of this epidemic. In the management of the civil affairs of that city, Gen. Butler has enforced cleanliness and quarantine with a rigor never known in any city on this continent. In contrast with New Orleans we may place Port Royal, S. C. Yellow fever has appeared recently at this point, and according to the reports, with the greatest virulence in the unpoliced districts. Certain portions of the town contain undrained reservoirs of sewerage, and here the disease first began its ravages. We may learn some useful facts in civic police from the arbitrary military rule which governs many Southern cities.

—

The form of examination before the Army Medical Board will be found in this number. The questions will be found to take a comprehensive range of subjects in all departments of medicine, surgery, midwifery, materia medica, etc. The medical student who contemplates entering the army will now learn the scope of the examination, and prepare himself accordingly.

—

The Annual Oration before the Academy of Medicine was delivered on Tuesday evening, at Dodworth's Hall, by Dr. S. C. Foster. The audience was large and select. The President, Dr. Anderson, was in the Chair, and first introduced the Rev. Dr. Vermilye, who opened the exercises with an appropriate prayer. The orator was then introduced, who discussed at length the many-sided character of the medical profession, its duties, its labors, and its rewards. The address was attentively listened to, and will soon be published by the Academy.

—

The medical examinations under the draft in this City and in Brooklyn were concluded on Saturday last. The care with which Surgeon-General Vanderpoel selected the corps of examining surgeons, gave very great satisfaction to our citizens. It was frequently remarked, that a body of men so competent for a special duty was never before appointed at Albany. Every surgeon appointed served faithfully, though it required on the part of many a great sacrifice of valuable time. The statistics which have been recorded will be valuable, and we trust the Surgeon-General will, at some future day, have them collected and published.

—

In another column will be found a notice of a meeting of a Naval Medical Examining Board, which is about to meet at Philadelphia, to which we invite the attention of students.

Reviews.

The Action of Medicines in the System. By Frederick William Headland, M.D., B.A., F.L.S. Fourth American Edition. Philadelphia: Lindsay and Blakiston. 1863. Pp. 448.

We gladly welcome another edition of this excellent treatise. It is by far the most useful work on therapeutics in our language, and could be studied daily by every practitioner with great advantage.

A Practical Treatise on Dental Medicine, being a Compendium of Medical Science, as connected with the Study of Dental Surgery. By Thos. E. Bond, A.M., M.D., Professor of Special Pathology and Therapeutics in the Baltimore College of Dental Surgery. Third edition, revised, corrected, and enlarged. Philadelphia: Lindsay and Blakiston. 1863. Pp. 411.

This work has proved very acceptable to the dental profession, as is proved by the issue of a third edition. It belongs, however, both in pathology and practice, to a past age, and is not such a work as we should care to place in the hands of a medical student.

Anatomy of the Arteries of the Human Body, Descriptive and Surgical, with the Descriptive Anatomy of the Heart. By John Hatch Power, M.D., Professor of Anatomy in the Royal College of Surgeons, Dublin. Authorized and adopted by the Surgeon-General of the United States Army, for use in Field and General Hospitals. Philadelphia: J. B. Lippincott & Co. 1862. Pp. 401.

This work has been republished under the authority of the

Surgeon-General of the United States Army. The design of the re-publication was to furnish the surgeons of the army and of the hospitals with a volume containing in convenient form a full description of the arteries, and the several operations upon them. The work will admirably answer the design of the publisher. It is also well adapted to the surgeon in civil practice, and to the student of operative surgery.

FORM OF EXAMINATION OF CANDIDATES FOR ASSISTANT-SURGEONS IN THE U.S. ARMY.

The following questions selected at random from those used by the Army Medical Board which was in session in Washington, in May and July last, and of which the Surgeon-General was President, exhibit the character of the examination.

Previous to the assembling of this Board, the examinations for admission into the Medical Staff of the Army were entirely oral, except that a short thesis was required of each candidate on some medical subject.

Now, the examination is entirely written, except that the candidate is examined from one to two hours on his literary and scientific qualifications, in which his knowledge of history, geography, zoology, literature, natural philosophy, ancient and modern languages, etc., etc., is thoroughly inquired into.

After this, a set of written questions on some one branch is given to him; he is furnished with writing materials, and three hours allowed him in which to give his answers. These answers are then signed and handed into the Board with the questions, and so on until he has been examined in all the branches.

A merit roll is kept, in which the result of the examination in each branch is recorded.

It will be seen from the questions submitted, that no one who is not thoroughly posted in his profession, should present himself before the Board.

SURGERY.

1. How are fractures of the femur in any position of the shaft or condyles ascertained, and how are they treated?
2. What are the symptoms and treatment of syphilitic iritis?
3. Describe the surgical anatomy of the parts involved in the operation for ligature of the femoral artery at the points usually selected for that operation?
4. Describe the surgical anatomy of the parts involved in the lateral operation for stone, and describe the operation?
5. Enumerate the coverings of inguinal and femoral hernia, and give the important anatomical relations of each?
6. Describe the operation of resection of the knee-joint, and give the causes demanding the operation?
7. Describe the varieties of cataract, causes, pathology, and treatment?
8. Describe the symptoms of fissure of the anus, and treatment?

ANATOMY.

1. Describe the origin, course, and distribution of the pneumogastric nerve?
2. Describe the carotid artery, its origin, course, relations, and branches?
3. Give the surgical anatomy of the parts concerned in the resection of the elbow-joint?
4. Give the surgical anatomy of the perinæum
5. A bullet passes through the arm above the elbow, subsequently it is found that the extensor muscles of the hand are paralysed. What nerves have probably been wounded?
6. What is the minute anatomy of connective tissue?
7. What are the histological appearances of a thin transverse section of the shaft of a long bone?
8. Give the microscopical anatomy of the kidney?

PRACTICE OF MEDICINE.

1. Give the symptoms in detail of a case of confluent small-pox, terminating in recovery, with the diagnosis from measles prior to the formation of the pustules?
2. Describe briefly the symptoms and treatment of a case of remittent fever, assuming during its course a typhoid character?
3. How would you treat a case of acute pleurisy if you saw it before effusion had taken place into the thoracic cavity? How, if effusion had already taken place?
4. Mention the prominent symptoms of chronic rheumatism, with some of the remedial measures appropriate?
5. Enumerate the several organic lesions and functional disturbances which may produce diarrhœa?
6. What do you understand by Bright's disease of the kidneys?
7. Enumerate the principal causes which may produce phosphatic deposits in the urine. Give the appearances presented by such deposits to the eye and the microscope, and the treatment proper for such cases?
8. Specify the rational symptoms and physical signs by which you would discriminate between a case of chronic bronchitis and one of phthisis?

GENERAL PATHOLOGY AND PATHOLOGICAL ANATOMY.

1. What do you understand by inflammation?
2. Describe briefly the appearances of the naked eye and the microscopical anatomy of the process which terminates in the formation of pus in the subcutaneous areolar tissues?
3. Mention some of the chief causes that produce tuberculosis, and describe the appearance to the eye and microscope, of distinct yellow tubercles of the lungs?
4. Enumerate the chief morbid alterations which may actually be observed in the blood?
5. Tell what you know of the pathological anatomy and histology of the glands of Peyer.
6. What are the prominent phenomena which discriminate between sthenic and asthenic forms of disease?

PHYSIOLOGY.

1. What is the composition of the gastric juice, and what functions are assigned to it by modern physiologists?
2. What is the composition and origin of urea?—what becomes of it in chronic diseased conditions of the kidney?
3. Under what circumstances does sugar originate in the economy; what is its function, and what becomes of it?
4. What do you understand by nervous irritability? Can it be destroyed without destroying muscular irritability?
5. What are the earliest internal changes in the ovum after impregnation?
6. Describe the Graafian vesicles, and give an account of the formation of the corpus luteum.
7. What is reflex action? Enumerate some of the chief reflex actions constantly going on in the healthy adult?
8. What is the general arrangement of the nervous system of articulata?

OBSTETRICS.

1. About what time were forceps introduced into the practice of modern midwifery? Name some varieties and describe the difference.
2. What are the indications for the use of the forceps, and how are they to be applied?
3. How many varieties of puerperal convulsions are usually treated of? Name them, and give the appropriate treatment in each case.
4. Give diagnosis of breech presentation, and state the comparative number of vertex and breech presentations.
5. What is meant by Dystocia? Enumerate some of the causes.

6. How many positions of vertex presentation do you admit, and how many of the breech?

7. How does a face presentation differ from a vertex, and can it be changed? If so, how and when?

8. What is the technical term for milk leg? Give its pathology.

MEDICAL JURISPRUDENCE AND TOXICOLOGY.

1. Describe the symptoms of poisoning by acro-narcotics. The remedies to be employed in cases of such poisoning.

2. Describe the tests for corrosive sublimate, with its antidote.

3. What means would you employ to distinguish whether the stains on a sword were blood stains or ordinary rust?

4. What are the antidotes to be administered in cases of poisoning by the mineral acids?

5. In case a person should be found dead in bed, what steps would you take to ascertain the cause of death?

6. What are the symptoms of poisoning by oxalic acid? The treatment?

MATERIA MEDICA.

1. When was Quinine discovered? how is it obtained? in what form is it used in medicine? State its chemical composition. What the sources of supply (commercially), and what adulterations have been found, and what substitutes for it have been proposed?

2. Do all cathartic medicines act alike? If so, how? If not, state the differences.

3. How many preparations of arsenic are in general use in the practice of medicine? Give the officinal names and chemical composition of each.

4. What is Alcohol? What are the methods of obtaining it? What is the strength of officinal alcohol?

5. State the varieties of opium found in the markets, their commercial history, physical differences, the method of obtaining the best quality for medicinal use.

6. What is chloroform? When was it discovered and by whom? How is it made, and when was it introduced into the practice of medicine?

7. Write out in full, or abbreviated, a compound prescription for the apothecary, for putting up a powder, a mixture, a solution, and also for pills, giving the usual apothecary's signs, and the directions for taking the doses of each.

CHEMISTRY.

1. Give the chemical history of nitrogen, and of its compounds with oxygen and hydrogen. Describe the mode of manufacture of nitric acid.

2. Describe the oxyhydrogen blowpipe, and the uses to which it is applied.

3. What are the Haloid salts? Name some of them.

4. What is Iodoform? How is it made?

5. Describe sodium. Give the detailed history of its oxide and of the compounds formed by it. Write the officinal names and give the chemical formulæ of all compounds of it used in medicine.

6. Can oxalic acid be made artificially? If so, by what process? Write the formula of oxalic acid.

HYGIENE.

1. Is the mouth or source of a river the more healthy, and which point would you select for the location of a camp or hospital, and why?

2. What are the effects of having too many men crowded together in a hospital? State fully the nature of the evils and their mode of action.

3. What means would you use for warming, lighting, and ventilating hospitals and barracks?

4. Name several of the principal disinfectants and their mode of action.

5. How would you estimate the amount of water required for washing, cooking, and for the water closets of a hospital for five hundred men?

6. If the men of a camp suffered greatly from enteric irritation how would you proceed to determine the cause? If after inquiry into other causes (here state what other causes might produce such irritation) you have reason to suspect the water as the cause, how would you determine as to its impurity?

7. What are the best means of getting rid of the excrementitious matters of a camp, of a camp hospital, and of a permanent hospital?

Correspondence.

NAVY DEPARTMENT, BUR. MED. AND SURG., November 7, 1862.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—I will be obliged to you, if you can give notice in the MEDICAL TIMES of the 15th inst., that a Board of Naval Surgeons will assemble at the Naval Asylum, Philadelphia, on Monday, Nov. 17th, for the examination of candidates for the appointment of Assistant Surgeon in the Navy.

In addition to the compensation published in the "TIMES" of Oct. 25th, it is proper to add that medical officers, by Act of Congress, approved July 17, 1862, share prize money, "according to their rates of pay in the service."

Very respectfully, your obd't servant,

W. WHELAN.

Army Medical Intelligence.

A Medical Board has been directed to convene at Santa Fé, N. M., to examine Surgeon MCNULTY, of the California Vols., for an appointment in the corps of Volunteer Surgeons.

Assist. Surgeon J. M. ROBINSON, U. S. Vols., has been ordered to report for duty to the Medical Director of the District of Western Virginia, on being relieved by Dr. ALFRED BUCKINGHAM in his duties at Camp Dennison, Ohio.

Surgeon R. CRESSON STILES, U. S. Vols., Surgeon BASIL NORRIS, U.S.A., and Assist. Surgeon WILSON, have been assigned to duty for the examination of drafted men at Pittsburg, Philadelphia, and Harrisonburg, Pa., respectively.

Surgeon D. W. HAND, U. S. Vols., lately in charge of the General Hospital at Newport News, Va., has been ordered to report to the Medical Director at Washington for duty in the Patent Office Hospital.

Surgeon N. R. DERBY, U. S. Vols., has reported to Gen. DAVIS, at Columbus, Ky., as Medical Director of the 4th District, Western Tennessee.

Dr. N. S. DRAKE has been ordered to receive five hundred patients on board the Daniel Webster at Washington, D.C., and proceed with them to Portsmouth Grove, R. I. Assist. Surgeon J. N. MILLER, 120th N. Y. Vols., accompanies them as Assist. to Dr. DRAKE.

Surgeon R. H. ALEXANDER, U.S.A., and Assist. Surgeon W. C. SPENCER, U.S.A., have been assigned to duty with Gen. BANKS, the former as Medical Director, and the latter as Medical Purveyor of the troops of his command.

Surgeon T. H. BACHE, U. S. Vols., is on an inspecting tour of the hospitals at Baltimore, etc.

Surgeon A. B. SHIPMAN, U.S. Vols., recently on duty at the General Hospital, Newport News, Va., is on leave of absence on account of ill health, at Syracuse, N. Y.

Surgeon H. WARDNER, U. S. Vols., has been assigned to duty at Cairo, Ill.

Surgeon I. H. BOUCHER, U. S. Vols., has been ordered to report to Gen. MCPHERSON, at Bolivar, Tenn., as soon as he breaks up the Depot Hospital at Cairo, and turns over the stores, etc., in his possession.

Assist. Surgeon A. M. CLARK, U. S. Vols., has been released from confinement in the Old Capitol Prison and

returned to duty, the charge of having beaten one of his patients not being true.

Dr. Charles Culverwell has been directed to report to Surgeon F. Jacobs, U.S.A., in charge of Convalescent Camp, near Fort Ellsworth, Va.

Assist. Surgeon H. F. Segler, 8th N. Y. Vols, has relieved Dr. H. S. Henion, on duty with the 6th Battery N. Y. V. Light Artillery.

Surgeon W. Dickinson, U. S. Vols., has been relieved from duty at the General Hospital, Benton Barracks, St. Louis, and ordered to report to the commanding officer, Salem, Mo.

Surgeon Artemas Chapel, U. S. Vols., has returned to duty with the 1st Division, 12th Army Corps, from leave of absence.

Surgeon B. Beust, U. S. Vols., is in charge of the 9th Army Corps Hospital, Knoxville, Md.

Dr. A. B. Crosby of Hanover, N. H., late Brigade Surgeon of Vols., has declined the appointment of Surgeon of Vols., having received an appointment in the Medical Department of Dartmouth College.

Surgeon J. G. F. Holston, U. S. Vols., has been placed in charge of the Overton Hospital at Memphis, Tenn.

Assist. Surgeon E. Dodd, U. S. Vols., has been assigned to duty at Jefferson Barracks, Mo.

Surgeon D. J. McKibbin, U. S. Vols., has reported for duty at the General Hospital, Hilton Head.

Assist. Surgeon L. Taylor, U.S.A., is on duty as member of a Military Board at Fort Steilacoom, W. T.

There are now absent from the Army of the Potomac eighty-six Medical Officers, of whom thirty-five are absent sick, thirty-seven without leave, and fourteen from causes not specified. There are also a considerable number of vacancies in the Medical Staff of the Volunteer regiments.

The Medical Inspector-General having reported unfavorably of the situation and condition of the General Hospital at Annapolis Junction, Md., the Surgeon-General has directed it to be discontinued, and the building to be turned over to the Quartermaster's Department.

The General Hospitals at Craney Island and Newport News, Va., have been broken up; the number of sick in General Dix's Department having been reduced by shipments of sick and wounded soldiers to northern hospitals.

The premises of Messrs. Hatch and Meaker, on North Central Avenue, Baltimore, Md., have been rented by the United States for hospital purposes.

There are now in the 150 General Hospitals of the United States, 60,515 sick and wounded soldiers. Of these 12,665 are in the Western Departments, 17,214 in Washington and vicinity, and the remainder in the various General Hospitals throughout the Atlantic and Gulf States. To attend those properly, it is necessary to keep employed a force of 400 stewards, 300 wardmasters, 6051 male and female nurses, 3025 laundresses, and 2017 cooks, making a total of 72,308 non-combatants; although medical officers are not included. If to these were added the sick in the Departments of the Pacific and New Mexico, those at home and in regimental, brigade, division, army corps, and private hospitals, there is no doubt that the number would be swelled to 100,000.

The Medical Officer in charge of the General Hospital at Judiciary Square, Washington, has been directed to appropriate one of the wards for treatment of diseases of the eye and ear exclusively. Dr. Hildreth has been directed to report to him for special duty in charge of the ward.

On the representation of the Medical Director of the Department of New Mexico, of the importance of his services, the General commanding has suspended the order relieving Surgeon I. F. Gmelin, U.S.A., from duty in that department.

The sick and wounded at Blackwell's Island, New York, have been transferred to Central Park and Newark Hospitals; and the Medical Director at New York has been authorized to remove the sick from the City Hospital, 319 Broadway, N. Y.

J. Theodore Heard, M.D., who had been, since the middle of May last, the Chief Medical Officer of Gen. Duryea's Brigade, was, on the 26th ult., assigned to duty as Chief Medical Officer of the 2d Division (Gen. Rickett's), 1st Army Corps, Army of the Potomac—a position which he temporarily filled from Sept. 10th to Oct. 3d.

DEPARTMENT OF THE TENNESSEE.

The Medical Director of this Department, Surgeon H. R. Wirtz, has issued a circular to the medical officers of the Department, dated at Jackson, Tenn., Oct. 23d. The following Divisions are made:—

1st Division—Gen'l Sherman—south of Hatchee and west of Bolivar. Head-Quarters, Memphis. Division Surgeon, Hartshorn; Chief of General Hospitals, Holston.

2d Division—Gen'l Hurlbut—south of Kentucky line, to Hatchee on the west and to Bethel on the east, including Bolivar. Head-Quarters, Jackson. Division Surgeon, Keenon; Chief of General Hospitals, Strawbridge.

3d Division—Gen'l Hamilton—all south of 1st and 2d Divisions. Head-Quarters, Corinth. Division Surgeon, Campbell; Chief of General Hospitals, Gay.

4th Division—Gen'l Davies—all north of the 2d Division, including the District of Cairo, and of the Mississippi, Forts Henry and Donelson, &c. Division Surgeon, Derby; Chief of General Hospitals, Stearns.

H. R. Wirtz, *Medical Director.*

Medical News.

Death of Sir Benjamin C. Brodie, Bart., F.R.S.—On the evening of the 21st October, was added to the number of the departed, a man to whom the unanimous consent of the profession has long given a pre-eminent position amongst us. We need hardly mention the name—Sir Benjamin Brodie. For a long time, the state of his health has been such as to cause much anxiety both to his immediate friends and to the members of his profession. Laboring under the severe affliction of blindness, he has undergone four operations in his eyes without success; and he has, moreover, suffered from a painful affection of the bladder, and malignant disease of the shoulder-joint. At last, full of years, full of honors, and rich in the well earned rewards of his scientific knowledge and its skilful application to the relief of suffering humanity, this great surgeon has left the world.—*Brit. Jour.*

The following-named Surgeons in the State of New York are appointed for the several places of rendezvous, and will report for duty to the Commandants: Albany, S. D. Willard; Yonkers, Geo. B. Upham; Plattsburgh, William N. Coit; Fonda, Jeremiah Snell; Auburn, Edward Hall; Elmira, E. L. Hart; Buffalo, J. S. Trowbridge.

M. Bouchut tells us that he has studied meningitis by the aid of the ophthalmoscope. He discovered congestions and venous dilatations, varicosity and flexusity of veins, thrombosis of veins and hæmorrhages in the retina from rupture of vessels!

Professor Esterle of Novaro has died at the age of forty-four, from puruleut infection, contracted while attending a difficult labor.

The Francisco journals state that Dr. Bodinier, a French physician, was drowned at the time of the burning at sea of the *Golden Gate.*

The Ophthalmic Congress has selected Vienna as the place of its next annual meeting, and has appointed Arlt, Blodig, Gulz, Jäger, sen. and jun., and Stedwig, as committee-men.—*Brit. Jour.*

The last report of the Government Inspectors of Mines tells us: that, for every 74,674 tons of coals raised a human life is sacrificed.—*Brit. Jour.*

Original Lectures.

LECTURES
ON THE
DIAGNOSIS OF DISEASES OF THE HEART.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE DURING THE PRELIMINARY TERM.
SESSION 1862-63.

By AUSTIN FLINT, M.D.
PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE VII.—PART I.

Absence of Organic Murmurs in Cases of Enlargement of the Heart, as Evidence of the latter existing independently of Valvular Lesions.—Modifications of the First Sound Produced by Hypertrophy and Dilatation.—Diagnosis of Softening and Fatty Degeneration of the Heart.

Gentlemen:—In my first lecture I considered the means of determining enlargement of the heart, and I stated that, in the great majority of cases of enlargement, valvular lesions are found to exist. In considering the diagnosis of valvular lesions in the last three lectures, I have had occasion repeatedly to refer to the production of hypertrophy and dilatation as effects of obstructive or regurgitant valvular lesions. Enlargement of the heart, however, in a small proportion of cases, occurs without being associated with lesions of the valves. We determine the coexistence of valvular lesions and enlargement, by finding, in addition to the signs of the latter, one or more of the different organic murmurs of which I have treated at considerable length. And we determine the existence of enlargement without valvular lesions, by finding that none of the organic murmurs are present. As a rule to which there are but few exceptions, absence of murmur warrants the conclusion that valvular lesions do not exist.

In my first lecture, also, I considered the means of determining whether enlargement of the heart be due to predominant hypertrophy or to predominant dilatation. Additional means of making this discrimination consist in modifications of the heart-sounds. These I could not present until the characters which belong to the heart-sounds in health had been considered. Let me now point out these additional means of diagnosis. They relate to the first sound of the heart. This sound is modified differently in cases of enlargement, according to the kind of enlargement, that is, whether it be by hypertrophy or by dilatation.

If the heart be hypertrophied, the augmented power of the ventricular systole increases the element of impulsion of the first sound. This effect is especially marked in proportion as the left ventricle is hypertrophied. The movements of the apex against the thoracic walls take place with an abnormal force, and the sound thereby produced is correspondingly greater than in health. The increase of the element of impulsion renders the first sound not only louder than in health, but longer, and the booming quality is more marked. In cases of enlargement, then, increased loudness and length of the first sound, with the booming quality strongly marked, denote that the enlargement is due to predominant hypertrophy, and that the left ventricle, especially, is hypertrophied.

On the other hand, if the heart be dilated, the ventricular systole being proportionately weakened, the element of impulsion in the first sound is feeble, or, perhaps, altogether wanting. In great weakness from dilatation, there is no element of impulsion; the valvular element alone is appreciable. And in proportion as the element of impulsion is deficient, the first sound is weak, short, and the booming quality absent. If the element of impulsion be altogether wanting, the first sound is as short as the second sound; it is valvular in quality like the second sound, and weaker than the second sound even directly over the apex. In cases of enlargement, then, relative weakness of the first sound, with shortness of this sound, and the valvular taking the place of the booming quality, denote that the enlargement is due to predominant dilatation.

These effects of dilatation lead us to the consideration of the diagnosis of softening and of fatty degeneration of the walls of the heart. Softening of the heart occurs in certain cases during the course of the continued fevers, and occasionally in some other diseases. Fatty degeneration involves softening, and occurs not unfrequently either with or without enlargement, and with or without valvular lesions. Of softening either from fatty degeneration, or otherwise, the effect is to weaken the power of the heart's action, and, as a consequence, the first sound of the heart is weakened and modified. The change in the first sound is the important physical sign taken in connexion with the associated circumstances pertaining to the history and symptoms.

If in the course of typhoid or typhus fever, the first sound of the heart becomes, as compared with the second sound, feeble, losing the element of impulsion, and, hence, becoming short and valvular in quality like the second sound, even when the stethoscope is applied over the apex, we have grounds for supposing that softening has occurred. Dr. Stokes has called attention to these modifications of the first sound, and the extinction of this sound in some cases, as indications for the use of alcoholics in continued fever. These changes as regards the first sound constitute a better criterion of weakness of the heart's action than the pulse, and, therefore, auscultation of the sounds of the heart should not be neglected in watching the course of these, and, indeed, other forms of fever.

The diagnosis of fatty degeneration of the heart, so far as physical signs are concerned, is based on the same modifications of the first sound, together with the absence of much enlargement, and of organic murmurs. Fatty degeneration, especially if the left ventricle be affected, weakens the heart's action, and, consequently, the element of impulsion of the first sound is impaired or lost; and if this sound be divested of the element of impulsion, it becomes short and valvular like the second sound, but, as we have already seen, less intense, or even inappreciable at the apex. Absence of usual enlargement and of organic murmurs, is an important point in the diagnosis, because similar modifications of the first sound may be due to dilatation of the heart either with or without valvular lesions. Organic murmurs represent valvular lesions, and the existence of these, with enlargement, contributes to render dilatation probable; but, even without organic murmurs, if the heart be much enlarged, the probability of sufficient dilatation to account for the weakness of the heart's action, renders the diagnosis of fatty degeneration problematical.

But fatty degeneration may coexist with valvular lesions and more or less enlargement. The diagnosis is then not so easy. We may, however, in certain of these cases, determine, with considerable positiveness, the existence of fatty degeneration. The diagnosis is to be based on the fact that the enlargement is not enough for an amount of dilatation sufficient to explain the existing weakness of the heart's action.

In determining the existence of fatty degeneration, with or without valvular lesions, other circumstances than the signs are to be considered. The age of the patient is one of these circumstances. Fatty degeneration of the heart rarely occurs in youth, or the early part of middle age. If the patient be over forty or fifty years of age, the probabilities of this lesion are much greater than if the patient has not reached these periods of life.

A tendency to the deposit of fat throughout the body, or obesity, is another circumstance. During middle age the fatty diathesis is apt to become developed; and, although fatty degeneration of the heart may occur in those who are not corpulent, but spare, it oftener occurs in those who manifest a general tendency to the deposit of fat.

The *arcus senilis* is another circumstance. Many persons undoubtedly have this fatty change of the cornea who do not have fatty degeneration of the heart, and *vice versâ*. It has not the diagnostic significance attributed to it by Canton, who was the first to show its pathological character; but it is entitled to some weight in the diagnosis.

Finally, a tendency to syncope on exertion, and the occurrence of the pseudo-apoplectic seizures, not accompanied by stertor and not followed by paralysis, which have been described especially by Stokes, concur with physical signs, and the foregoing circumstances, in strengthening the diagnosis of fatty degeneration of the heart.

Original Communications.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By A. CLARK, M.D.,

PROF. OF PRACTICE AND PATHOLOGY.

(*Concluded from* p. 271.)

In the acute attacks, where the œdema is rapidly produced, including the form which follows scarlet fever, and that which attends and follows pregnancy, a large proportion recover. Frerichs thinks that of those who have the acute disease, excluding the two special forms, two thirds get well. If this estimate were to include the scarlet fever cases, I must claim a much larger proportion of recoveries. This is the most common form of the disease often called "acute dropsy," or "acute œdema." The treatment which has seemed to me most useful is the diaphoretic. Cups, with scarifications to the loins in adults, and in persons full of blood possibly a small bleeding from the arm, are often important aids; and a brisk cathartic is undoubtedly useful; but the external diaphoretics are my chief reliance. The warm bath, continued for twenty minutes or half an hour, at the onset, and a warm bed to keep up the perspiration produced by the bath, and after that the frequent use of the foot bath, under the bedclothes, so as to keep the skin moist for days together, if need be, will do more to relieve the kidneys of their congestion, renew their healthy action, carry off the œdematous effusion, and protect from cerebral oppression and convulsive attacks, than all other means together. With children, after scarlet fever, it often happens that they cannot be kept in bed. They do not feel ill, though the whole body is swollen, until the urea begins to paralyse the nerve forces of the brain, provokes inflammation of some serous membrane, or causes coma, or explodes in convulsions. In case the child cannot be kept in bed, it is best to cover him with flannel garments warmly, keep him in a room of sufficient size, the temperature of which is preserved steadily at 72°, and let him follow his amusements, interrupted, from time to time, if the skin ceases to be moist, by the footbath. The bed, however, is the safest place, and well disciplined children can be kept in it. Food should be given sparingly at first, but increased as the disease diminishes, or as time or a tendency to chronicity may demand nutrition. Iron is of little use, except in protracted cases. The bowels should be moved daily.

Regarding the form of Bright's disease which accompanies pregnancy, it is important to say that, in general, these and all other means are merely palliative, and are never used with the perseverance which is so often rewarded in the cases just alluded to. It is only after delivery that they give much promise of permanent relief. In these cases the gravid uterus, or at least the state of pregnancy, produces and keeps up the affection, and while this state continues the power of medicine is limited. It is true, that up to the time of parturition, the dangers are not usually great though the inconvenience or often the suffering is considerable; but it is fair to assume that every day is adding something to the disorganization of the kidneys, and increasing the risks of congestions, inflammations, convulsions, and coma, when the crisis arrives. These facts have so deeply impressed the minds of those who are much engaged in obstetrical practice, that the question has been seriously entertained, "whether premature labor should not be induced." I need not say this is a grave question, and can only be decided by deliberately weighing the dangers of the disease in one scale and the dangers of the interference in the other. After the uterus has been relieved of its burden, and after the dangers of the puerperal state are passed, though, in the majority, the albumen disappears in a few days and convalescence is pretty rapid in many cases, there is still a long illness to be endured. The disordered kidneys will often require two, three, or even more months to throw off their load of exudations, and regain their natural structure. During this time the symptoms of Bright's disease continue, and the disease will require nearly the same treatment as the chronic form.

The chronic disease is sometimes the result of the acute, but much more frequently it makes its approaches insidiously; it produces no pain, it gives no alarm, it mines in the darkness until the patient's waning strength, pale countenance, and swollen feet or face suggest to him the need of professional advice. The disease is established, and is probably incurable before we are aware of its existence. Our thoughts, under these circumstances, turn to the cause or causes which have produced this state. If the patient is a spirit-drinker, he should abandon the use of alcoholics, till for some good reason his physician advises them. If, in his employment, he has been exposed to cold and moisture, if there have been errors of diet producing dyspepsia, these are in general avoidable causes. The warmth and secretion of the skin are to be secured. The bowels are to be soluble; a mild purge occasionally may assist in relieving the congested kidney; cups dry, or in the early stage, with scarifications, perhaps, are favorite applications, and are theoretically admissible; travelling, or easy exercise in the open air, during the mild season, and a sea voyage, have each had a beneficial influence; and among the many medicines which have from time to time been urged as general remedies, one and one only has been received with general favor—iron, in one or other of its approved forms. At one time it was hoped that the mercurials or the compounds of iodine, by their alterative powers might restore the kidneys to soundness, but experience has crushed these hopes. There is probably no more powerful derivative from the kidneys than the vapor or hot air bath; one or other should be used at least once a day. The perspiration so induced should be continued for an hour in bed. The surface after this perspiration should be rubbed with a dry towel till it is red, to enable it to resist the cold, and then the patient may dress and go about as usual.

On the other hand, there is probably nothing among the avoidable agencies more pernicious than cold, and the bad effects of cold are heightened by dampness. Hence there is no rule more important than that which enjoins the full protection of the body against these influences. This statement will not require a more striking illustration than the following case, which for brevity I greatly abridge. (Case 24, of the Case Book.) This man was first treated by the sweating plan. Very little perspiration, however, could be induced; and after a protracted trial the external diaphoretics were abandoned. The corrosive chloride of mercury was then tried, with no important result, however. Purgatives were used pretty freely. Nothing so far had produced any very decided impression on the patient's condition. Still he did not grow worse till one day, without my knowledge, the floor of the ward (basement) was partly taken up for repairs, admitting freely the cold air from the cellar. This was about the 16th of November. This unfortunate draught was allowed to continue two days. I did, what I could as soon as the fact came to my knowledge, which was on the second day, to protect the patient from

the effects of this mischance. But in the first twenty-four hours the dropsical accumulation had much increased, and in two or three days more the dyspncea became extreme, the face swollen, the lips purple. He lingered in this state two days. The heart was hypertrophied, weighing 17 oz., but there was no valvular disease or adhesion of the pericardium. The lungs were in the highest degree œdematous. These are the lungs referred to on page 487. The kidneys weighed 7oz. each, and were almost as wbite as milk.

It is worthy of particular note that two other patients in the same ward, suffering from the same disease, grew rapidly worse, under the action of this cold air, but did not die from the train of disasters immediately following it.

To remove the dropsy, *baths* used in the way just indicated are among the most efficient means. For this purpose they may be taken twice a day. The patients often complain that they are weakened by them; but though a temporary feeling of weakness or lassitude follows them, the strength usually increases as the anasarsca is removed. *Purges* are sometimes necessary for the removal of serous accumulations. Epsom salts and fluid extract of senna have been longer and better borne than any other which I have tried. The elaterium has great power, but its drastic properties make its frequent repetition dangerous. Nothing will replace it, however, in certain emergencies. Pulvis purgans is well borne by most persons; but the cremor tartar alone an ounce or so a day, or every second day, will often rid the system of a great deal of water with only moderate irritation. *Diuretics* have been given in this disease with hesitation. Their action is in the highest degree uncertain. There is, I believe, a very general conviction, that the irritating articles of this class should be prohibited. There is reason to suppose that cantharides and turpentine should not be used even as applications to the surface. But I do not hesitate to use the acetate of potassa, the iodide of potassium or infusion of digitalis freely, and am persuaded that life has been prolonged by them. Theory would teach us not to stimulate a congested kidney; but observation does not convince us, when the morbid fluids are evacuated by these agents, that the chances of life are not as good as when the same result is accomplished by purges. The decoction of apocynum cannabinum is a favorite with some physicians. I hardly know whether to speak of it as a diuretic or cathartic; it may act as either or even both. It is a very powerful medicine, and has at times done what nothing else would do. But often the stomach will not tolerate it, and its depressing influence is too great. I rarely use it now unless driven to it by the failure of other means. Acupuncture or lancet-punctures, in swollen limbs, will give some temporary relief when the internal evacuants have failed. The serum will commonly drain from these little openings in great quantity and unload the body as well as the legs, but the uræmia predisposes to inflamations everywhere, and this tense skin is especially liable to it. I have seen these punctures provoke fatal eyrsipelas many times in hospitals, and more than once in private practice. The skin often bursts in little fissures or is blistered when distended by œdema; then the fluid will escape as when punctures have been made. An erythema commonly attends these spontaneous openings, but erysipelas very rarely. Nature's openings are in this respect better than ours, but they are tardy. Bandages are nearly useless, except when the anasarca is inconsiderable. It has been urged against them that they cause absorption of the serum with the urea it contains, and by more deeply poisoning the blood produce dangerous cerebral symptoms. I have seen nothing that would lead me to apprehend such a consequence, but they often irritate the swollen limbs, and provoke a little cutaneous inflammation which compels us to abandon them. This inflammation, however, is not usually dangerous, and the bandages may be used so long as they add to the patient's comfort.

Œdema of the lungs is very common in the progress of this disease, and it is usually attended by a bronchorrhœa that fills the tubes with mucus, and the chest with râles, and makes the breathing most difficult. It is when the heart and kidneys suffer together that this œdema and this bronchorrhœa, one or both, are most troublesome. They usually come on slowly, increasing step by step, as the general œdema increases, till they reach a degree which compels the patient to abandon the bed and get what sleep he can in his chair. This is a condition which will not commonly admit of more than temporary relief. The treatment does not differ much from that to which we resort to overcome the general œdema. A brisk purge will sometimes permit sleep for one or two nights, when, if it is not repeated, the same distressing condition returns. But a purge daily will at length exhaust the vital energies. It is a sad alternative. It is, however, a choice between death imminent and death delayed. In some of these cases, when the lungs are not too greatly loaded, an anodyne in moderate dose acts kindly, and gives rest for a few nights. But the sudden pulmonary œdema is the most alarming. It comes like a foe in ambush, and gives no warning. I believe the best we can do in such an attack is to cover the chest with dry cups, put the feet into warm water as the patient sits in his chair, for he cannot lie down unless he becomes insensible; give him to inhale Hoffman's anodyne or sometimes the vapor of warm water, and if it is protracted, a purge. I have had oxygen and nitrous oxide administered by inhalation with the happiest effects; but these require time in their preparation, and the patient is usually relieved, or sometimes dies before either of them can be got ready. Where these attacks are regularly periodical, as happens only rarely, we are tempted to give quinine in the intervals. My observation will not enable me to speak very confidently of its preventine qualities. This kind of œdema often abates without wholly subsiding, and remains still as a source of distress for days and weeks. Then it identifies itself with the more chronic form just referred to, and requires the same treatment. In a case of this kind that I saw in the practice of Dr. Geo. T. Elliot, the very pleasantest effects were produced by the injection of a solution of sulpbate of morphine under the skin, used only in small quantities. Similar effects I have seen in other cases from applying the sixth or the eighth of a grain of the undissolved sulphate to a blistered surface.

Over the convulsions, when they occur, we have but a limited control. Where they attend the contracted kidney, they are not usually preceded by weakness and marked cachexia, and the patient will usually bear a moderate bleeding from the arm, and a few leeches to the temples, and an active purge. Beyond this, diaphoresis secured by the foot-bath in bed, the prudent use of chloroform to diminish the severity of the spasmodic paroxysms, and cooling applications to the head, will constitute about our whole duty. If our patient does not die in a convulsion, his cbances of escaping the consequent congestions or apoplexy are unfortunately but too few. When this formidable symptom (for, terrible as they are, these convulsions are only an evidence and manifestation of urea in the blood) occurs with the large white kidney, it is after œdema has existed for a considerable time after the cachexia is established. We do not under these circumstances attempt venesection. We apply leeches hesitatingly and sparingly; we are almost limited to the purge, the foot-bath, and the chloroform. It is worthy of remark that in the range of my experience, convulsions occurring in persons having the large white kidney are less fatal than when tbey are associated with the opposite state of the organ. This result cannot be explained by the treatment adopted, for too often in the latter, death has occurred before any active treatment has been instituted.

For the amaurosis of fatty degeneration of the retina I know of no specific or special treatment. I have said that if the symptoms generally are ameliorated, the vision will in most cases be improved. The treatment of this symptom is the treatment of the principal disease.

For the dyspeptic symptoms and the flatulency, our means of relief are limited to the selection of food, according to

the patient's experience of its kind or unfavorable action on the stomach, and the use of stomachics, particularly pepsine and the nitro-muriatic acid, or the carminatives.

There is a diarrhœa sometimes in course of Bright's disease, which, when it occurs, is usually very obstinate. I have found that it is sometimes controlled by the Oak Orchard Acid spring water, which contains some free sulphuric acid and many sulphates, or by the pernitrate of iron.

The uræmic vomiting, when it occurs, is also very obstinate. Its proper treatment is the treatment for uræmia. But this is usually unsuccessful, and we are left commonly to do the best we can with that unpleasant symptom. Blisters and counter-irritations of all kinds over the stomach are entirely useless. One or two drops of hydrocyanic acid, or the cold carbonic acid water, will sometimes soothe for a little while, and creasote has been recommended. It is often relieved for a time after free perspiration. But in truth, we cannot do much with it. Nutritive injections into the bowel have been tried, to give the stomach rest, with temporary relief.

Hæmaturia, when it occurs in this affection, is usually an early symptom. It is sometimes the first that attracts attention. For this I rely chiefly on tannin and the fluid persulphate of iron as internal medicines, cups to the loins, and the warm bath.

Finally, regarding the inflammations which occur in the course of Bright's disease; they are very formidable, as appears from the great mortality they produce; yet in general they do not admit of a treatment varying much from that which the same conditions require when they occur alone. The meningitis (secondary) is almost invariably fatal. Every variety of treatment with which I am acquainted has failed. I have, therefore, no suggestion to make. But the pleurisy, if it is the only complication, will usually yield to cups, blisters, and diuretics, as it does when it occurs singly. Diuretics, however, always uncertain, are unusually so when the kidneys are diseased; and the external diaphoretics may be substituted for them. The pericarditis of Bright's disease when it occurs upon an old heart affection, and when the dyspnœa is already considerable, will generally be fatal; but as it commonly presents itself, its natural tendency is to recovery, and beyond cups, soothing doses of opium, a blister, and evacuants, it demands but little medication. The mercurials do not appear to render the recovery any more certain, or any more rapid. The pneumonia is more grave, and yet many recover from it. When this disease occurs as a primary affection our treatment is rather energetic; but in the management of it in this connexion, we must remember that pneumonia *can* get well without treatment. The usual means then must be modified to meet the enfeebled condition of the patient, and the impoverished state of his blood. Peritonitis, always formidable, is doubly so in Bright's disease. Many of us now rely almost entirely on the antiphlogistic powers of opium, to combat it as it ordinarily occurs; but we are limited in the use of this drug by the diminished tolerance of it in the uræmic; still, used prudently, and in view of this fact, it is our best medicine. Dysentery in this connexion has not received any new treatment. It will usually bear leeches to the arms, but not general blood-letting. Erysipelas, though of frequent occurrence, did not cause death in the catalogue of cases I have presented. In a larger number of cases it will find a place. Ordinarily, however, it yields to the soothing local applications, and the general sustaining and tonic plan which fortunately is now in general favor. Cirrhosis is not, strictly speaking, one of the inflammatory complications of Bright's disease; but the two affections occur together often enough to fix our attention. I refer to the fact here for the sake of saying that any considerable amount of abdominal dropsy is not a feature of the renal, but it is of the hepatic disease; and that tapping, when it can possibly be avoided, is an expedient of very doubtful propriety. Peritonitis so often follows the trocar under other circumstances, that we are not authorized to take the risks of it till other means are exhausted, and the patient's life is in danger from dyspnœa.

Now, Mr. President, the task which I have appointed for myself is done, and I return to you, Sir, and to the Fellows, my thanks for the patience and attention with which you have listened to these protracted and tedious details, which however far from exhausting the topic, I fear you will think too much extended for the opening of a discussion. The remarks, such as they are, I submit, with the assurance that the ability and learning of gentlemen who are prepared to offer the Academy their opinions and facts will correct any errors into which I may have fallen, and extend our knowledge of this terrible disease and its relations. Before I sit down I ought, perhaps, to apologize for violating in some measure the promise implied in the statement made when the Academy first entertained this subject. Several weeks have elapsed since that statement was made, and I have not thought it wrong to study the subject in some of its branches, more "elaborately" than I then supposed possible. These studies, however, I may be permitted to add, have been very fragmentary, interrupted sometimes for days, and I am sorry to find that these "*solutions of continuity*" have betrayed me into several repetitions, which in a truly "elaborate paper" would not have found a place.

I have selected from authors some statistical matter relating to points that have been considered, which I do not propose to read; but with the approval of the publication committee it may appear in the bulletin as an Appendix to these remarks.

Statistics.

Age.—Dr. Bright reports among his hundred cases, 19 small kidneys, 25 large, and 56 of which the size was probably normal, or nearly normal. The ages of those having the small kidney are stated for 13; of those having the large, for 18.

18 *Small Kidneys.*	*Age.*	18 *Largest Kidneys.*	*Age.*
Oldest person .	55 yrs.	Oldest person .	56 yrs.
Youngest person	15 " 1	Youngest person	17 "
Next the youngest	40 "	Bet. 17 and 40 inc. .	" 12
Bet. 40 and 55 inc. .	12	Bet. 40 and 50 .	" 4
	13	Bet. 51 and 56 inc. .	" 2
			18
Average age 44½ years.		Average age 34½ years.	

Dr. Wilks reports 56 cases—contracted kidneys, 33; large white kidney, 23. Of the large kidneys five were found after scarlet fever. The ages were severally 3, 4, 6, 8, and 23 years. In the person 23 years of age, the disease passed into the chronic state.

33 *Small Kidneys.*	*Age.*	18 *Large White Kidneys.*	*Age.*
Oldest person .	73 yrs.	Oldest person .	51 yrs. 1
Youngest person	24 " 1	Youngest person	12 " 1
Bet. 30 and 40	7	At 17 and 18	" 2
" 40 and 50	9	Bet. 20 and 30	" 6
" 50 and 60	10	" 30 and 40	" 5
" 60 and 70	4	" 40 and 42	" 3
At 70 and 73	2		
	33		18
Average age 48¼ years.		Average age 30¾ years.	

These summaries will corroborate the statement regarding the ages in my own cases, Bulletin, p. 483.

The sex in Dr. Wilks's cases was as follows, viz. for the contracted kidney, females 12, males 21—for the large white kidney, females 5, males 13 (v. supra, p. 484). The sex is not deducible from Dr. Bright's reports.

Œdema occurred in Dr. Wilks's cases more frequently with the large than with the small kidney.

Dropsy with the Small Kidney.		*Dropsy with the Large White Kidney.*	
Usually slight and often temporary	in 16	Usually considerable, in a few slight	in 16
Did not occur	" 11	None	" 1
Not mentioned, probably none	" 6	Not mentioned	" 1
	33		18

Compare these tables with the statement made, supra, p. 484. The dropsy, in these 18 cases of Dr. Wilks, lasted for four years, but not continuously, in 1; for three years continuously in 2; for five months to one year, in 6; three and a half months in 3; the duration is not mentioned in 5; no œdema in 1.

Regarding the concurrence of cardiac and renal disease, it was noticed in Bright's cases 49 times, or in only one less than one half, though the heart disease does not seem to have been considerable in a portion of them. There was hypertrophy in 29, and the heart is described as "large" in 15. Of these 49, eight had also valvular disease; three others had valvular disease alone; and one had ossification of the aorta. With the hard, or hard and contracted kidney, hypertrophy occurred 21 times, with the soft or "large kidney" 8 times. Among the thirty-three cases of contracted kidney reported by Dr. Wilks, there were 12 cases of disease of the heart, including valvular diseases. The cardiac affections are not spoken of in the account of his other cases (v. supra, p. 487).

Cirrhosis occurred six times, and fatty liver four times with Dr. Wilks's thirty-three contracted kidneys. They are not mentioned in the histories of the large kidneys. Dr. Bright reports among his hundred cases, twenty-three in which the liver was more or less granulated (cirrhosis?), but he does not recognise any relation between that lesion and the contracted kidney. He says on the contrary: "In nearly half the cases in which the liver was reported *remarkably healthy* (9), the kidneys were hard and advanced far in disease. The most advanced liver disease accompanied every variety of disease of the kidneys." "Fatty liver was found twice, and the kidneys were soft, smooth, and white, but in one case of slightly fatty degeneration, the kidneys were hard and lobulated" (hobnail), (v. supra, 485–7). I copy this statement, because it *does not* corroborate the impression that would be produced by the rather remarkable coincidences in my own cases.

Œdema of the lungs was noticed in Dr. Bright's autopsies thirty-one times, though it does not appear to have been in his view the cause of death in more than seven. In these thirty-one cases the heart was hypertrophied in 14; large in 5; affected with valvular disease, aortic, in 1; ossification of the aorta in 1 (21); no hypertrophy or valvular disease in 10=31. The state of the kidneys in these cases was as follows, viz. hard in 15; soft in 11; hard and large in 2; contracted without being hard, in 3=31 (v. supra, p. 470).

Dr. Bright had 1 death from œdema of the glottis; 13 from epilepsy or convulsions; 3 from sanguineous apoplexy; 8 died comatose, besides 2 from "cerebral irritation" (he seems reluctant to recognise secondary meningitis); 5 from peritonitis, &c. But I will cite the causes of death from Frerichs' report, as quoted by his reviewer, *Brit. & For. Med. & Chi. Rev.*, No. XVIII., p. 237, which collects the cases of Bright, Barlow, Christison, Gregory, Martin Solon, Rayer, Malmston, and his own, to the number of 241.

Uræmic intoxication,	86
Pneumonia,	20
Peritonitis,	11
Pericarditis,	9
Pleurisy,	7
Prostration from vomiting and diarrhœa,	20
" " profuse dropsical effusion,	10
" " phthisis pulmonalis,	27
" " caries of the joints,	6
" " gangrenous erysipelas,	5
Serum in the lungs and pleura,	26
Œdema glottidis,	2
Cerebral hæmorrhage (apoplexy),	6
Meningitis,	1
Cerebral softening,	1
Cancer of the stomach,	1
Phlebitis, result of venesection,	2
	240

The error in the footing of this table is apparently not the only one it contains. It embraces Dr. Bright's cases. I count from his (Bright's) tabular view, in which each case is given in synopsis separately, thirteen instances in which he believed death was caused by epilepsy or convulsions, with or without coma, not one of which appears in this table, unless they are gathered into the folds of that broad phrase "uræmic intoxication." Cerebral irritation, congestion, and effusion appear in Dr. Bright's cases, but not in the table. Meningitis appears to have caused but one death, while in my own cases it was found twice in twenty-two autopsies (v. supra, p. 487). This, too, is probably included in the first item. Dr. Bright had one death from gangrene of the lungs, and one from bronchitis, and six sudden deaths, neither of which appears in the table. The cause of death in Dr. Wilks's cases, so far as reported, and in my own, was, in one-half, some inflammatory affection. The proportion from this cause in the table is greatly reduced, a little over one-fourth.

Frerichs collects from the same authors, adding Becquerel, the complications discovered after death in 292 cases. (Rev. p. 223.) Among them there was hypertrophy of the heart in 99, in 41, associated with valvular disease; in 75 there was œdema of the lungs, and in the majority of these there was mitral disease, and in 4 of them œdema glottidis; in 27 there was pneumonia; vesicular emphysema in 22; cirrhosis was found in 26; and fatty liver in 19; apoplexy in 11, in 8 of which there were hypertrophy of the heart and valvular disease; in 40 the serous fluid of the brain was increased, in 10 markedly, and in 2 there was meningitis (Dr. Bright alone had thirteen cases of meningitis); in 81 there was inflammation and lymphy exudation on the serous surfaces, pleurisy in 25, peritonitis in 33, pericarditis in 13. "In 3 there was enlargement of the *lumbar glands*, sufficient to impede the return of blood by the renal veins."

The few statements given in this Review, relating to convulsions in the puerperal state, are worth citation in connexion with others as the basis of more extended observations on that subject (p. 242) "Of 20 cases observed by Devilliers and Regnauld, in which albuminous urine was passed by pregnant women, eclampsia followed in 9." "Eleven of Devilliers' and Regnaulds' 20 cases; 2 of Lever's 12 cases; and 3 of 7 observed by Frerichs, terminated fatally." I quote from the American edition of the Review; it probably required a type-setter either European or American to find "eleven" deaths in "9" eclampsias. The figures as they stand are not worth much. They do, however, point to a great mortality in these convulsions, and suggest a more careful examination of the matter.

Dr. Behm had 20 cases of puerperal convulsions. Of the mothers 17 survived, of the children 12. The convulsions commenced as follows: 7 before the completion of the natural term of gestation, causing premature labor in 5; 2 during the stage of dilatation; 7 after the escape of the liquor amnii and before the birth; 1 during the expulsion of the placenta; 3 after labor and during the puerperal week. Thus in 13 the convulsions began at full term, in 11 of these they continued into the puerperal week.

The Report of the Dublin Lying-in Hospital for the seven years commencing November, 1847, numbers 63 instances of convulsions. Of the mothers 13 died, of the children 25. Primiparæ 49, multiparæ 14. A few only had not œdema or albumen in the urine.

Kassing reports 16 cases of puerperal eclampsia. Of the

mothers 9 died, of the children (18) 3 were born dead. In all but one there was reason to believe that Bright's disease existed; in 10 there was œdema, mostly of the feet and face. In one case there were eighty-one paroxysms, but no œdema was found; in another there were sixty paroxysms, and no albumen discovered in the urine. The convulsions began in 10 during the dilatation period; in 1 during turning; in 3 during the first week; in 1 during the second, and in 1 during the eighth week.

Dr. Letzmann examined the urine of 131 pregnant women for albumen, beginning in most of the cases in the sixth month. He found it in 37, in 26 primiparæ and 11 multiparæ. He thought that in about one half of these the albumen had its origin in catarrh of the bladder, although he only assured himself of it in 9. He considers the albumen in the other half as evidence of Bright's disease. He holds the eclampsia also as evidence of the same affection, and leaves us to infer that about 18 of these 37 had convulsions. The mortality is not stated in the abstract from which this is quoted.

From these reports we may infer that puerperal convulsions are fatal to the mother 25 times in 100 cases, and to the child about 35 times in the 100. But we can deduce from them nothing positive as to the ratio of eclampsia to albuminous urine. As far as they go they lead to the belief that not more than one half of those who have this symptom have the convulsions.

In addition to what I have said of the symptoms of Bright's disease, it is stated (Rev. p. 233), that ringing in the ears and difficulty of hearing were noticed by Frerichs in 4 of 41 cases, and by Bright and Barlow in 6 of 37 cases, while the latter authors found 4 cases of *amaurosis uræmica* in the same 37.

ON RESECTIONS IN MILITARY SURGERY,

AT A LATE OR EARLY PERIOD OF THE WOUND.

BEING REMARKS AND FACTS ON THE PROBABILITY OF A GREATER AMOUNT OF SUCCESS IN THE LATTER.

By RUFUS KING BROWNE, M.D.,

SURGEON IN CHIEF OF U. S. GEN. HOSPITAL, DEPARTMENT OF GULF.

(*Concluded from page* 273.)

It is on these accounts that it is highly desirable a considerable part of the practice in resection in military surgery should be immediate, that the experience thus gained in the field and ambulance may determine a rule as to the best time of operation, and as to circumstances under which a variation from that rule may be made. Ordinarily, if the wound is very recent, a perfectly fresh one, it is easy to ascertain with the finger whether the bone has been struck. If it *has* been, and the evidence of a complete fracture exists, a straight incision to the bone, where it would be in resection, should be made, and extractable fragments felt for by the fingers. If these are ascertained, the operation should be continued to the end, as a complete resection. This should be the rule in the cases of comminution of the bones of the arm and leg, where that operation is preferable to amputation; but if amputation is to be done it should not be left undone until it succeed resection, and if the latter is to be done it should not be left undone until it follows a period of suppuration and inflammation of a wound, involving a shattered bone, nor until the foul and sloughing state of the limb is such as has long since passed the stage when the question *between* amputation and resection was appropriate. Either operation may be appropriate, or neither of them, when the case should be placed in the domain of therapeutics; but we cannot be in error in supposing it mistaken to leave both undone because we fail in a decision, and long afterwards to perform one—resection—when the tissues have become wholly disqualified to accomplish its aim or intention; and also leave undone the other and perform it when the destructive morbid process and the prior operation, which fails, have done their ruinous work, and leave but little, perhaps no chance, for success in amputation.

Particularly do the above truths exist in the case of wounds of the thigh, with comminution of the femur, shaft, or head, in cases of which it is, more strongly than in the others, true, that to operate for resection long after the period of suppuration was established is almost certain to prove a failure and, perhaps, a fatality. This is exemplified in the cases of this bone I have presented. Here any operation should be done while the wound is freshest, even if the operation be of the character of resection, and proceed to no further extent than the cutting down freely and extracting *all* the pieces whose consolidation with the tissues has been broken, with the cutting away of all the ragged and pointed parts. Perform when the wound is freshest, in these cases, if amputation be decided as best. If neither of those is decided on, then we have properly *excluded* any other operation at a later period, and this states precisely what should be. For nothing can be more revolting to all the dictates of conservative surgery than, resection having failed—the condition of the patient being that of inability to recover from it—amputation should be done because the prior was the case. The false estimate in both operations, where resection was done first and amputation subsequent, appears to be the *same*. Resection was done after the patient failed to improve from his wound, and amputation was done because he failed to improve from the resection. Hence we say we think of no case in which amputation ought to be done *after* resection has turned out badly. If resection, it should be done while the wound is freshest. If amputation, the operation may be delayed, but *without* any *interposition* of resection. Undoubtedly many cases, which only amputation could benefit, would be done at the proper time if the idea of resection did not interpose and *revert* that of amputation to be done as a later and following operation. We are not assuming that either operation would be better than *none*, for that is precisely the thing which should be decided, and either of the three decided *of itself* at the earliest moment, only that if it be resection, it should be done when the wound is freshest, and elsewhere herein we state what should be a substitute for complete resection, viz. the extraction of all the actually comminuted parts by a sufficient amount of cutting to freely accomplish this. We have before said the operation of resection should be decided on when the wound is freshest. Such indeed would be the rule in *amputations* in military surgery, were it not for the special reason of the existence of shock, and, for the time being, an impairment of the higher powers of the nervous system. But this special reason has but little weight in the less formidable operation of resection, since that requires but little ability in that system to sustain it, while the more formidable operation, amputation, exacts its full powers to survive it.

Seeing that the foregoing so forcibly presents itself, have we not reason as well as facts to urge us to the practice of resection at the earliest moment practicable, when the facts are, so far as I have gathered and presented them, to perform it at a late moment? Our present practice fails to *conserve* life and limb near so frequently, as in resections in civil life. The difficulties of the operation are not so great but that any surgeon competent to an amputation can creditably and successfully encounter them, and, however this may be, it is his business to do his best towards it, and not to leave it undone until he finds by a want of skill he fails. But, moreover, there are several very strong special *reasons* which urge us to the adoption of a frequent performance of resection nearest the time of receiving the wound, reasons which, although they are not in the repertory of considerations of the older living surgeons, respecting the operation in question, are of paramount character with the proficient in modern learning of morbid physiology. These are the facts concerned in every question of injury to the bones. By means of these facts alone, understood and credited, are we enabled to account for the very remarkable, and, as yet, in surgery, wholly un-

comprehended difference in the depreciation of vitality and reduction of the system, between wounds of the flesh, however large, and wounds of the flesh with breaking up of the continuity of the bone. These facts in the character of reasons, not less than others, impel us to adopt the earliest moment for our operation, before this depreciation and reduction of the system supervenes. Having learned the character of the processes in, the formation of bone, and its minute anatomy, a knowledge which dates exclusively from the researches of Virchow, but little is needed to effect an understanding of how the breaking up of bone is so greatly injurious to the body. In a general sense we know that the extent of the injury is proportionate to the calibre of the bone, and not to the extent of the flesh injured, even in case the wound is compound. Hence it is familiar to us to regard a mere flesh wound lightly. That we do not habitually do the same when the injury to the flesh is a part of a compound fracture is solely because experience has taught us that when the *bone* is injured a wound is serious. Virchow taught us that bone is not in any sense a deposit, a regular accumulation of solid particles, but is constructed from materials flowing in the blood, in virtue of certain excessively minute channels and corpuscles—the bone corpuscle—of cellular character. These channels, at the first not unlike vascular capillaries, wall themselves in and become a firmly adherent lining thereto. They are then like an extended pore. Interposed everywhere are the "bone corpuscles," whose arrangements finish, so to speak, the complete skeleton mesh upon which the bony substance is organized; besides this there are the ordinary blood-channels which supply the material for the whole construction, while they themselves compose a part of it. Intimately investing these is the periosteum. It is perhaps getting the cart before the horse to say this *secretes* the bone, which it really does no more than the neurilemma secretes the "white substance of Schwann," or the "axis cylinder." It really maintains the whole intact, as an impermeable investment, and furnishes the anatomical bounds of the tissues on the one part, and the bone process, on the other, within which alone bone can be produced. Break this investment and the bone, and the little vascular channels do not occlude their openings in virtue of their own constitution, as bloodvessels do. Everybody who has observed the course of an amputation knows that they continue to ooze blood much longer than the cut soft tissues. For a first period they continue to do this, but next the red globules, as in ecchymosis, impact and disintegrate. Their di-integrated substance clogs up the porous channels, from which now gain issue only the phosphates and other saline materials of bone formation. These are added to the suppuration of the soft part. They are the richest and most life-sustaining materials of the blood, and it is the loss of these which, in part, constitutes the remarkably depreciating drain on the system in destruction of bone. The increased amount of suppurated matter invariably noticed in such cases is due in part to their addition to the products of suppuration in the soft tissues. But along with that, there is the latter exacerbated and aggravated, not only by what is ordinarily known as irritation by fragments, but also by the presence in them of the freed phosphates. The pieces of bone begin to disintegrate into smaller pieces, under conditions that do not admit of "absorption," and add their sum to the dead matter of the wound. Where the bone has hitherto been without an atom of room beside it, there is a space filled with tattered flesh, shreds of foul and sloughed tissue, crumbled and decaying fragments of bone, and liquid products of animal decomposition; while above all, all of this having ceased any organic connexion with the limb, from the moment it so ceased, has been the object not of physiological but *chemical* processes, developing foul and fœtid gases and diffusible poisonous and infectious organic particles. From the moment chemical change takes place in these, any reparative process, for the time being, is totally precluded.

The tissues yet in organic bonds, little by little yield and give way before the destructive contact of the putrescence. The vascular channel contains their moving supply of building matter, and the blastema for all formations in granulation, up to the point where the capillaries are terminated by occlusion, but they find no channel of return to the veins, and continue to infiltrate these substances into the tissues around. The infiltrated matter spreads above, below, and around as it is furnished, the arm everywhere becomes œdematous, and now the tissues of every description participate in the ruin. Absorbents, nerves, muscular tissue, and even the adipose tissue, change accordingly. This is the condition and course of morbid changes which more or less completely take place prior to the period, in the present practice of resection, when amputation or resection is performed. The surgeon may decide between the two at an *earlier stage* of this progress, but of course *later* he will have no difficulty in *deciding* on amputation, and in the performance of it is accomplished precisely what we have already said. Have we not facts, then, which produce our conviction that it would be better to operate *before* all this occurs? Such is the case in civilian resection, to which, perhaps, may be attributed its remarkable conservative successes.

The period of doubt in the cases in question is precisely the one when we should *decide* and perform. To act cautiously in doing a thing is *not* to leave it *undone*. The phrase "It is difficult to decide," occurring in medical literature, is accepted as meaning—*not* to decide. But what would the world think of the cultivators of other branches of science, who desist from their operations because there was a difficulty?

But the difficulty *whether* resection should be undertaken at the earliest moment of the wound, can only be removed by a change in the present practice of performing the operation when nature has left no room *for a choice*.

If he perform resection, the freshly cut surface, if at the seat of the wound, is exposed to the instant chances of contamination and infection, from the suppurating and sloughing tissue first wounded. If the line of his incision extend into a firm and undivided opening with any part of the track of the wound, the fresh surface will hastily assume all the foul character of the old wound. While, if his incision for the removal of the bone be apart from the original wound, there is the complication of two seats of suppuration, augmenting the draught upon the resources of the hapless patient.

We have seen in the cases we have numbered, that resections in military surgery, after the suppurative process is fully established, most frequently do not save from fatality, while we learn that in civil practice they most frequently *do* save from fatality. Undoubtedly, the former will never turn out as many successes as the latter; but perhaps, may turn out *more* than heretofore.

In the number of cases examined, there was discernible by me no fault in the treatment following the operation. I could imagine no improvements or change for the better in it. The dressings of four of my own cases were kept saturated by dilute tr. arnica. In three of these autopsy disclosed a foul and sloughy state of the wound—and the fourth was not observed by me.

Continuing our view of the present practice of resection, which leaves undone the operation until a late moment, we observe that by this failure the surgeon *forces himself* to adopt either resection, or amputation instead; when in either event, the state of the limb and the powerless condition of its owner, render him wholly unfit to recover from either. Operating has been left undone, until *either are alike a necessity*. Either one or the other cannot be said to *be a choice*, for the operation has been left, until both are equally futile or immediately dangerous. And as before it was postponed because postponement *could* be adopted, he now operates because it cannot *longer be postponed*. The conditions of choice no longer exist, because either of the operations which could before be chosen between,

must now be performed, if anything whatever is to be done.

But when this period has arrived the surgeon will most probably amputate—indeed, he will generally be driven to it as a *last resource*. Consider now, how an amputation under these circumstances stands. The wounded is in a state ineffectual to repair his losses or reunite his wound. To all his previous losses is now by amputation added that of so much blood. Between this, and allowing him to linger on—to continue without surgical interference, there is now *no choice*—nor between these two *and* resection, now, is there any more choice, that conservative surgery dictates. The three are identical in being ineffectual, except only in this particular, that amputation will effect the greatest *immediate* loss.

But, moreover, the demand for some rule is forcibly indicated in the fact, that most surgeons of a short experience—such is my own—will not operate without the guidance of rule already established. This is shown in the fact, that even now, in late resections, by a common misunderstanding they suppose they follow a rule—which is the rule of *not* operating until the progress of the wound has shown no attempt at improvement. But the truth is, to *uniformly not do* an operation, is not *to act upon a rule.*

The necessity of a rule, therefore, is plain; and our purpose is accomplished in having explained, that there are grounds for intimating that a rule can be reached by substituting for our present practice of late resections, in a proportion of cases, the practice of resection when the wound is fresh.

By the rule we ask and hope, for we mean, no more than one similar to the variable and imperfect, though advantageous and necessary ones taught and adopted in *amputations* in military surgery.

If we set any value upon the latter we should also do the same upon the former. The ablest surgeons in the country have thought the latter so valuable as to make a special and expensive effort to diffuse the learning pertaining thereto, through the Medical Staff of the army, in various documents; and the effort which has the purpose of finding and establishing the former is no less respectable, and even noble, however the event may prove as to its success. For the task of the surgeon, though not always successful, is creditable and even noble. The most perfectly complete and hideous, though refined selfishness, is that in which the surgeon will do no operation unless all the chances carefully calculated are in his favor; that is to say, in which all these chances prognosticate one operation more which shall successfully redound to his fame.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, June 18, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. BYRNE'S PAPER ON PELVIC HÆMATOCELE.

(*Continued from page* 275.)

[Conclusion of Dr. Barker's Remarks.]

I do not wish to detain the Academy but a few moments longer, and I will consequently only allude briefly to one or two other points.

With reference to its treatment. It is yet a disputed point among some of the best authorities, whether, aside from such treatment as common sense would suggest, such as relieving pain, etc., it is best to resort to surgical interference or await the absorption of the effused fluid. In a certain class of cases it is found that the contents of the cyst have disappeared, while in another class of cases the contents of the tumor become disorganized, inflammatory action takes place in the tissues surrounding, pus forms, and we have a discharge. If this discharge takes place in the peritoneal cavity, death of course is the result. It may take place into the uterus, vagina, bladder, or rectum, and then the patient is apt to get well. In other cases surgical interference has been resorted to, and this interference consists in evacuating the contents of the tumor. It is unsettled whether it is better ever to resort to this method, or whether to leave it to nature, with the hope of its being eventually absorbed; especially as in quite a large number of cases where surgery interfered, a certain proportion of deaths resulted. I can only give my own views upon the subject. When the tumor is not large, and where the amount of extravasation is not very extensive, and especially where it is extra-peritoneal, I should trust for a time to keeping the patient absolutely in the recumbent posture, and sufficiently under the influence of opiates to allay the peritoneal irritation, and to such means of invigorating the general system as may be indicated. But where the amount of extravasation is large, containing from six to eight ounces to three or four pounds, I believe it is truly impossible to expect to get absorption. We must expect, eventually, to have suppuration excited, and we may have very unpleasant results from it, or death, or we must resort to a surgical operation, and this consists in the discharge of the contents of the tumor.

One word or two, in regard to the surgical procedure. It has been recommended by some to puncture the tumor with a trocar and allow the discharge to escape through the canula. The author of this paper recommends that it be punctured, and he did it successfully in his case. He prefers the rectum, inasmuch as the discharge which takes place is less apt to be offensive than through the vagina. In carefully studying the reported cases I believe that this method is not the best one. No one should attempt to introduce a trocar until after all the acute symptoms are passed by. Then you have coagulation, ordinarily, of the contents of the tumor, which afterwards become disorganized, and it is very difficult to effect a discharge through the canula. I should theoretically object to the method of Dr. Byrne, and for this reason that the anterior and posterior walls of the rectum are always in contact, and thus the evacuation will be very imperfect, while the cavity of the vagina is much more elastic, larger, and much more complete, and evacuation through this canal will be more perfect. Instead of evacuating with the trocar I have used the tenotomy knife. I make a free incision through the posterior vaginal walls and bring out the matter with the finger.

The results of this case, which we have just reported, I will at some future meeting present. As to the case itself I am not prepared to say whether it should be subjected to surgical interference or trust to nature, but I am inclined to think that it is not safe to leave it for the suppurative process.

Dr. Finnell was surprised to hear that extravasation of blood from the ovary was of such rare occurrence, as he had frequently met with quite a large number of instances where this was the case. He had seen an extravasation equal in size to a hen's egg. In fact, so commonly was this condition met with by him in his post-mortem examinations of females who, while menstruating, had committed suicide, that he was inclined to think that it was almost a natural process, unattended with any particular symptoms.

Dr. White, of Buffalo, having been invited to make a few remarks, stated that the subject was almost entirely new to him. He had no doubt that previous to the time that he knew of the existence of such a disease as hæmatocele, he had mistaken for it other tumors—in fact, he could bring to mind two or three instances of the sort which came under his observation about twelve years ago. Since he had learned of the disease he had met with four cases, the histories of which were not very unlike those narrated by Dr. Barker. The first case he saw in consultation in Gainesville, forty miles from Buffalo. The patient had ceased to menstruate, and the symptoms came on very suddenly. A sound was introduced, and the uterus was

found in the normal situation. A large tumor was felt between the rectum and the sound, and so much pain was occasioned by its presence that some interference was demanded. Accordingly, an exploring trocar was introduced, and about an ounce of grumous blood escaped. A small tenotomy knife was then introduced, and then a director, and the whole was laid freely open. The patient made a slow recovery. In the next case the symptoms were not so urgent, neither was the tumor so large, and not knowing what to do nothing was done save the following of general indication. The patient was laid upon her back and the tone of the system maintained until she eventually recovered. She has since given birth to a child. In the third case the same course was advised as was taken in the last case, but suppuration took place, a large amount of pus was evacuated, and the patient only partially recovered. The fourth case he saw in consultation with Dr. Hanley, now of Greenpoint, some six or seven years since, an Irish woman completed her labor with a little more than the ordinary amount of suffering. She was then attacked with bearing-down pains. Dr. H. made an examination, thinking there was possibly another child, when he found a large tumor pushing forwards the posterior wall of the vagina. The pain continued very severe, and Dr. White was sent for. Dr. W. was at first quite at a loss to make out what it was, and at first thought it was an ovarian or other extra-uterine tumor that had been displaced. In the course of the examination his finger broke though the vagina, and a considerable quantity of blood escaped. The diagnosis was then made without difficulty. The patient recovered. In making deductions in regard to the effects of treatment in these four cases he was inclined to favor evacuation. In conclusion he stated that he entirely concurred with the general views of the disease as expressed by Dr. Barker.

Dr. Noeggerath remarked, that the prominent position which French literature had attained with regard to the subject of pelvic hæmatocele, almost to the exclusion of that of other nations, should not be a matter of surprise. All the several departments of uterine pathology have received their first impulse from France, while England and Germany have followed suit. Thus the doctrines of the engorgement, of ulcerations, of dislocations, of peri-uterine affections, owe their birthright to French writers. In order to add a few names which ought not to be forgotten whenever the subject of hæmatocele is under consideration, I call attention to the eminent labors of Drs. Devalz, A. Puech, Gallard, Viguès, and Laugier. A more scrutinous inquiry into the merits of these several authors I will reserve for a future time, which I intend to devote to the reading of a paper touching this interesting affection. Peri-uterine hæmatocele has come to my personal observation three times. In two of these cases I was called in consultation after the first and most striking symptoms had passed over, and a retro-uterine tumor, and slight traces of peritoneal inflammation, were the indications for treatment. Both recovered without surgical interference. The third case, which was one of catamenial hæmatocele, occurred in a young lady, seventeen years old, who had been suffering from intense obstructive dysmenorrhœa, for at least two years previous to the attack which I am speaking of. These sharp hypogastric pains went on, increasing in intensity with every succeeding menstruation. On this occasion, as soon as the menses began to flow, the patient was forced to keep her bed, and the pain very soon became so violent that she had to cry out aloud. Tenderness on slight pressure of the abdomen soon became very marked, and the pulse rose up to 120 strokes in a minute. The tincture of opium in frequent and large doses, as well as warm fomentations to the stomach, proved unavailing; pain and fever increased steadily; the abdomen began to swell, and by percussion the formation of a tumor occupying the pubic region and right iliac fossa could be demonstrated; all these symptoms developed themselves during the night; and on the following morning, vomiting, great prostration, facies hippocratica, paleness of the skin, with cool extremities, added proof to our diagnosis of effusion of blood into the abdominal cavity. The greatest distress was experienced by the patient from the constant and vain efforts to void the bladder and rectum. The treatment consisted of iced brandy and opium. The latter remedy, however, was rejected by the stomach, and not absorbed by the rectum, into which it was introduced in five grain doses. When, however, I at last resorted to hypodermic application, all the beneficial effects of the drug were developed in less than five minutes; the pain ceased at once, the pulse increased in volume and slackened in frequency. At about the sixth day, very copious, serous (not, however, bloody) discharges took place from the bowels, and they were constantly followed by a feeling of relief, and buoyancy of spirits. Occasionally, this watery diarrhœa became so frequent that we had to check it, for the time at least, being fearful it might bring on exhaustion of the already greatly reduced forces of the patient. It could be easily controlled by subcutaneous injections, about thirty of which were made on both forearms, and to them, I doubt not, the young lady owes her life, and the perfect health which she enjoys at the present moment.

If there is an affection of the female sexual organs which is accompanied with all the symptoms generally thought characteristic of peri-uterine hæmatocele, it is acute salpyngitis, *i.e.* catarrh of the lining membrane of the Fallopian tubes; and I am astonished that not one of the many authors on pelvic hæmatocele has made the slightest remark of this fact. It would be out of the way on this occasion to describe the entire pathology of this interesting disease, and I will only say, that in the location, acuteness, and suddenness of the pain, in the inflammatory action which it kindles in the pelvic cavity, in the severe reaction of the system, and even in the physical alterations appreciable by examination which it develops in the intra-pelvic organs, there is so much resemblance with the symptomatology of pelvic hæmatocele, that in some instances nothing short of a post-mortem examination will be able to decide in the one or the other direction. This was illustrated to me in the case of a young lady, who died from the consequences of acute tubal catarrh. The patient to whom I refer was an unmarried female of about eighteen years of age, who had crossed the Atlantic about eight months previous to this occurrence. She had always been healthy up to the time of her journey to this country, since which time she complained occasionally of scanty and painful menstruation, which, however, had never troubled her sufficiently to call for medical attendance. In the month of May, 1860, she was taken with a sudden fright from seeing a parcel of clothes set on fire, which had been placed near a stove to be dried. In the same moment, when the shock had moved her, she experienced a sudden pain in the abdomen; she fell to the floor, and was seized with convulsions. These were followed by a comatose condition, from which, however, she recovered in about an hour. After that the principal features of her case were a general nervous prostration, and an intense pain in the umbilical region. Without exhibiting any other symptoms, she sank rapidly, and died in about twenty hours after the accident above described had taken place. The post-mortem examination showed a normal condition of all the inner organs, with the exception of slight cerebral and meningeal congestion. The only traces of disease were found in the uterus, its appendages, and the pelvic peritoneum. The latter was in the first stage of inflammation, and its cavity contained about two ounces of an opaque serum. The cavity of the uterus was filled with a yellowish milky fluid, and its lumen almost obliterated by the enormously hypertrophied and inflamed mucous membrane. Both the Fallopian tubes were distended, and filled with a liquid resembling fresh, healthy pus. The ostium abdominale showed a quantity of this matter at its orifice, and on microscopical examination the liquid exuded in the pelvic cavity was found to contain quite a large number of round pus cells, and a considerable quantity of those peculiar columnar epithelial cells,

which only exist in the mucous membrane of the Fallopian tubes.

The causes of pelvic hæmatocele may be comprised under the following heads:—1. Hæmorrhage of the womb, the blood passing through the Fallopian tubes. 2. Hæmorrhage of the tubes. 3. Hæmorrhage from the ruptured follicle of a diseased—apoplectic or inflamed—ovary. 4. Hæmorrhage from the rupture of a varicose vein of the utero-ovarian plexus. 5. Hæmorrhage from a ruptured ovum developed outside of the uterine cavity. With regard to treatment, it may be said that surgical interference ought to be deferred until all other resources of our art have been tried; the tumor ought to be punctured with the trocar in all those cases, and only in those cases, where its persistence threatens the life of the patient. In twenty-nine cases where the operation was performed, twenty-two recovered, while seven died. I prefer the use of the trocar to that of the knife, because it has happened that patients died from hæmorrhage of a branch of the uterine artery which supplies the superior and posterior wall of the vagina and its peritoneal lining.

On motion, further discussion on the subject was deferred to the next meeting of the Academy.

FOREIGN CORRESPONDENCE.

LETTER XVI.

By PROF. CHARLES A. LEE.

COLONY OF FITZ-JAMES.

(*Continued from page* 251.)

On every Sunday the colonists are taken out to wash in groups of twenty or thirty; some are even allowed to go out freely without their companions, and have never yet given the proprietors cause to regret the allowance of such liberty.

The organization of labor, then, is the essential feature in the treatment of the insane at the colony of Fitz-James. The regularity of life, the disciplinary order which characterizes every description of work, the kind of occupation assigned to every individual, according to his aptitude, all these are of the greatest importance, in exercising or diverting the feeble or perverted faculties. Each colonist finds, in the diversity of occupation which daily presents itself, all the elements favorable to the development and the exercise of his physical and intellectual activity. The inmates find here, apart from the occupations in which they are generally employed, the conditions of freedom and domestic life, which are very difficult to meet with in a large collection of patients. To this end is the peculiar arrangement of the sections, which are organized to receive but a small number. Many have their own servants who accompany them in their walks; some have the privilege of going out alone; and without quitting the colony, they find in the incessant movements incident to such extensive agricultural employment, sufficient to divert their minds, and render their sojourn agreeable. The colony thus offers to convalescents and tranquil curable patients, the most prompt means of hastening their recovery; it gives a salutary activity to their physical powers, by the wise application and selection of employment, and it moreover induces a favorable modification in the character of their mental disorder, and by the great freedom here enjoyed, they gradually become accustomed to the habits of domestic life. Even the incurable acquire in the discipline and regularity of life, here enjoyed, habits of order and of work, which makes them docile and industrious laborers.

At *Berrel* where the laundry is carried on, and employment requiring a certain amount of attention and constant physical exertion, the females are, for the most part, selected from the excited patients at the asylum. The washerwomen are nearly all afflicted with noisy delirium, and cannot be made to submit to the calm quiet of the workshop; they are generally selected from the more robust, and those best capable of performing this kind of labor. Those who spread out the clothes are selected from the melancholy patients; while the imbecile idiotic are entrusted with the duty of carrying the clothes from the wash-room to the drying department. The duty of selecting and folding the clothes is allotted to the tranquil monomaniacs, whose fixed ideas, hallucinations, allow sufficiently sustained attention Many of the convalescents, and some pay patients, are employed in this last occupation and in sewing.

The number of patients employed in this section is as follows: Washerwomen, fifty-four; folders, eight; dryers, eight; carriers, six; general duties, six; sewing, twenty-five; total, one hundred and seven. The *farm-labor* is so diversified as to furnish suitable employment to all kinds of mental derangement; every patient can be made useful in some way, as there is a great choice of useful and attractive occupation. The colonists are all organized into detachments, and each detachment points out, as it were, the intellectual aptitude of the individuals composing it. Such special workmen as are essential to agriculture, as cartwrights, blacksmiths, joiners, painters, etc., are also selected from the patients, and employed under the direction of the chief mechanic. The laborers of the field and the workshop, the care and management of the animals, the agricultural implements, etc., are distributed among the mechanics, monomaniacs, and demented; while the imbecile idiots are charged with the management and cleanliness of the court-yards, the cow-stables, the carriages, carts, etc. The patients engaged on the farm may be summed up as follows, according to the nature of their occupations:—Farmers, sixty; vegetable gardeners, fifteen; cowherds, eight; hostlers, six; swineherds, eight; shepherds, four; drivers who have charge of agricultural implements, five; laborers, ten; house service, twenty; cooks, three; engineers, two; farriers, one; turners, one; cartwright, one; painters, one; butchers, two; children, more or less occupied according to their fitness, twenty-two; total, one hundred and seventy. The director of the colony marks out every morning the labors for the day; these orders are given to the chiefs of the workshops, or detachments, consisting of twelve or fifteen in number, who see that they are faithfully carried out.

The division of time varies according to the season of the year. In summer the colonists rise at five o'clock in the morning, make their beds, take their first meal, and go to their work at six o'clock. They return at eight for breakfast, resume their labor at nine, and return at eleven. They spend three hours at rest and partaking a second meal (*dejeuner*), and return to labor at two, continuing it till four. They then repose and take a lunch till five, and the labor of the day closes at half past six, when they have supper, and retire to sleep at eight.

In winter they rise at six, take their first meal, but do no work till seven or eight; nothing is done on the farm at this season. After the first meal they work till nine and then rest till noon; at mid-day two hours are devoted to eating and repose; from two to four or five they work; then supper at six, and to bed at half past seven. They thus work but six hours per day. Some reward is allotted to each workman, according the importance of his work, and some addition to his ordinary food.

I noticed at the farm, a collection of idiotic, or imbecile children, most of them, as usual, marked by imperfect cerebral organization; some of them apparently without any brains at all. Among them was one well marked cretin, without goitre, from Savoy. They occupy by day a school-room, and have a dormitory entirely separated from the other patients. They spend four hours every day in school. During the interval of their school hours, some are occupied on the farm, the others are walking over the grounds. When they reach a certain age, and are susceptible of the least education, they enter the workshops of the asylum at Clermont, and are assigned some occupation. Some of them are already tailors, shoemakers, joiners, locksmiths, etc., and very useful workmen.

I have already stated that the results of this colonizing experiment have been remarkably successful. Imbeciles, idiots, the demented, the violently excited, and dangerous

patients, all have become docile workmen, and as industrious as the sane and intelligent. Even the miserable incurables, who have always been more or less dangerous, and a charge to their family, have, after a period of this disciplinary labor, been returned to their homes quiet and orderly, and capable of lucrative employments. The convalescents and curable remain generally but a short period, their mental condition rapidly improves; the others are restored to their poor families as soon as they can be made useful. At the same time the proprietor derives considerable pecuniary profits from their labor. The establishment, in fact, is a practical school of agriculture. All new modes of cultivation, all new and useful agricultural implements, are being constantly introduced and tested, and as the colony is situated in one of the most productive agricultural provinces of the kingdom, these experiments are of the greatest benefit to the farmers in the surrounding districts. Here may be seen the new mowing and reaping machines, ploughs, harrows, etc.; the raising and fattening of improved breeds of cattle, sheep, and swine; here are the finest draught horses in France; the best dairy cows, etc., and all this is evidenced by the numerous first prizes, which have been awarded at different agricultural fairs. All the buildings, courts, stables, etc., are kept in the very cleanest and best condition; every tool and instrument, after being used, is cleaned, and put in its appropriate place; the animals are all fed at fixed times; in short, all the details of the wisest and most careful administration, impart to those who are employed in carrying these out, and who can appreciate their advantages, a sense and habits of order and care, which they carry away with them, and which are ever after of the utmost benefit.

The population of those departments which send their insane to this establishment, is essentially an agricultural one; and they accordingly highly appreciate the great advantages of such an establishment; for they are constantly witnessing its beneficial effects on those who are returned in health to their homes, and who at once reduce to practice the knowledge they have acquired, and continue the industrious habits in which they have been so successfully trained.

Although great liberty is allowed to the patients, the attempts to escape do not average more than five or six in a year, and as they all wear a peculiar uniform, they are easily recognised and returned to the colony. No case of suicide has ever occurred in the establishment, although very large numbers of melancholics with suicidal propensities are sent to it. Thus, constant employment, and its interesting and diversified character, gives a favorable diversion to their thoughts, and then, the colonists themselves have a special surveillance over each other; and, if there are any who are predisposed to injure themselves, the more tranquil are advised to keep special watch over them. They are always working together in detachments; and if there is any attempt at escape or suicide, those who prevent it and give information are rewarded. In short, they form a mutual protection society, and there naturally spring up among them sentiments of intimacy and attachment, which exert a favorable influence over their moral faculties, and render their life in common agreeable and attractive. They soon learn to appreciate these friendly offices, and in a short time get rid of that suspicion which generally characterizes the insane.

During the last twelve years, in spite of many discouragements and obstacles, this Institution has been constantly increasing in prosperity. Beginning with 735 patients, it now has over 1300—1200 being the number to which it is limited by Government—561 males, and 666 females; of whom, 1012 are indigent, and 215 pay-boarders. Patients are sent to it from three departments, who pay one franc per day for males, and 95 cents for females. The pay-patients pay from $600 to $1000 per year, according to accommodation, number of attendants, etc. In short, the Institution is not only self-supporting, but a source of wealth to its proprietors.

The following statistics may serve to show the general results of the management. From 1851 to 1859, 3788 patients were admitted—1871 men, 1916 women; of these 2428 were incurable, 1360 curable. The incurable males forming 75·16 per cent.; the incurable females 58·24 per cent.; 24·84 males curable; 41·76 females do. Total, 67 per cent. incurable, and 33 per cent curable. There were discharged during the same period, 251 men and 233 women, total 584, cured; 141 men and 116 women, total 257, convalescent and much improved; total 841 cured, or convalescent; while 167 men and 114 women, total 281, remained uncured; 29 escaped, 17 men and two women; total discharged or escaped, 1152.

American Medical Times.

SATURDAY, NOVEMBER 22, 1862.

MANAGEMENT OF MILITARY HOSPITALS.

The last number of the Medical Times contains a paragraph relating to the military hospitals of the United States which will attract attention. From this statement it appears that there are now one hundred and fifty General Hospitals, containing in the aggregate sixty thousand five hundred and fifteen sick and wounded soldiers. The necessary attendants upon these hospitals, exclusive of medical officers, number nearly twelve thousand, as follows:—stewards, four hundred; ward masters, three hundred; male and female nurses, six thousand and fifty-one; laundresses, three thousand and twenty-five; cooks, two thousand and seventeen.

It would be surprising if a system of hospitals on a scale so grand and comprehensive should not attract popular attention. But when it is remembered that the patients are drawn from the families of the people at large, and that every neighborhood, and nearly every hamlet, has its representative in these institutions, the intense interest with which the public regard them is explained. No institutions in the entire country are so frequently visited, and the management of none is watched with equal solicitude. The most vague and indefinite rumor of mismanagement in any hospital arouses the popular sympathy; and the matter is at once and thoroughly investigated by voluntary committees of the people. If there is an abuse, the offender is sought out, and the popular voice imperatively demands his ejection and disgrace. If simple representation of the results of their inquiry to the proper authority does not promptly effect the object, they resort to the press and make inflammatory appeals to the public. Local associations in all parts of the country have their agents constantly visiting their wards, prepared both to provide for the wants in the hospital stores, and to detect and report abuses in management. The people may truly be said to have taken the military hospitals under their special guardianship. While it is true that many instances of what appear to be abuses to those unfamiliar with hospital management are but the necessities of circumstances beyond the control of the officers, or, perhaps, are really necessary to proper discipline, it cannot be denied that abuses do exist which need correction. They are, however, of a character to be appreciated fully only by a pro-

fessional reader. To some of these we shall briefly allude.

The first great error noticeable in the management of our military hospitals is deficient ventilation. Medical men and architects are not fully impressed with the importance of pure air in the prevention of those affections so prevalent and peculiar to hospitals. In the construction of these buildings they are solicitous principally about the warmth of the wards, and are almost regardless of the location and size of the windows, the position of the ventilating flues, and the arrangement of the beds. We have been astonished at the indifference of Surgeons-in-Charge to the therapeutic value of an abundance of pure air in the treatment of low forms of surgical disease, as gangrene, erysipelas, pyæmia, etc. Not unfrequently these cases, occurring in a ward, are isolated by being crowded closely into the corner, away from the window, from the currents of in-coming air, and from the sunlight. Here the poor victim, whose body is undergoing rapid textural dissolution under the disintegrating influence of a hospital blood-poison, inhales not only the emanations of his own decomposing tissues, but also of the fomites which fills every unventilated nook of a ward. It occasionally happens that we find among the regulations of a hospital that erysipelas, gangrene, pyæmia, and typhoid diseases are to be grouped together in a damp, unventilated, gloomy ward, in which it is not thought proper to place any other form of disease lest the patient should rapidly become typhoid. It were well if the recent teachings of an eminent surgeon, that *pure air is the best remedy for pyæmia and allied diseases*, were posted in large characters on the walls of every hospital-ward.

Failure to appreciate the value of thorough ventilation leads to the next most noticeable feature in hospital mismanagement, viz. *over-crowding*. In the French military hospitals 1700 cubic feet of air-space are allowed by regulation to each patient. In this country the minimum is fixed at 1000 cubic feet. And yet of our 150 military hospitals, we venture the assertion that not five per cent. allow 800 cubic feet of air-space to each patient, whatever may be their system of ventilation. In the majority 700 cubic feet is the maximum of air-space to each patient, and from this point hospitals may be instanced representing various figures in the descending scale as low as 250 cubic feet. And this last amount—little better than the famous Black Hole—is the maximum of air-space allowed in hospital buildings originally constructed for barracks, and almost destitute of ventilation. In large numbers of hospitals the beds are arranged at given intervals, without the slightest regard to the cubical area of the wards. The results of over-crowding are apparent in every hospital where it is practised, in the prevalence of low forms of fever, erysipelas, etc.

Allied to defective ventilation and over-crowding in its effects upon the diseases of the inmates, is lack of cleanliness of wards, and imperfect police of the grounds. In general the wards of our military hospitals present a good appearance on inspection; the beds are clean, and the floors show the effects of recent scrubbing. But a more minute examination reveals, *under* the beds, old clothes, soiled dressings, and a thousand nameless filthy articles which patients always endeavor to conceal about them. The bath-room and bath-tub are too often the temporary receptacle of every uncleansed or unemptied chamber vessel, of soiled and offensive linen, and of every slop that a lazy nurse does not care to remove. The laundry, the kitchen, and mess room frequently exhibit the same untidiness. If we extend our inspection to the grounds, we are still more impressed with the utter disregard of cleanliness which some medical men in charge of hospitals exhibit. Refuse material, and heaps of decomposing animal and vegetable matter, strew the grounds, and fill every undrained and unventilated corner. The privies are open vaults, alive with vermin, and constantly emitting volumes of foul, disgusting, and poisonous gases. These are diffused throughout the adjacent hospital buildings, adding tenfold to the fatality of typhoid diseases.

The last item of hospital mismanagement is the regulation of the diet. That great abuse has existed in providing suitable food, both in quality and quantity, is notorious. But to whatever extent this abuse may have been carried, we believe that the admirable "diet table" recently prepared by the Surgeon-General, and about to be enforced in all the hospitals, will effectually remedy this evil.

In reviewing these more noticeable defects in hospital management, we have alluded in general to exceptional cases. As a whole, our military hospitals are conducted with commendable intelligence and efficiency, when we reflect that but few surgeons in charge have had any previous training or experience in hospital management. The exceptional instances where these abuses exist, are under the vigilant supervision of the Medical Department, and the day is not distant, we trust, when they will cease to be.

THE WEEK.

Several Surgeons of Boston have addressed a letter to Surgeon-General Hammond, U. S. Army, representing that the sick and wounded require more careful attention and protection against neglect, and the performance of needless operations. They believe that a considerable proportion of the surgeons in the army are "incompetent as operators, and also incompetent to judge when operations are required, and at what time and under what conditions of the system they can be safely performed." They add: "We have reason to believe that the profession has been disgraced by many of its members, who, having no just conception of the sacred duties of their calling, have entered upon it from wholly selfish and mercenary motives." They suggest as a remedy that the Surgeon-General "appoint a sufficient number of surgeons, who shall be men of acknowledged ability and experience in surgical injuries and operative surgery, to each Corps d'Armée, Division, Brigade, and dépôt for the wounded, whose duty shall be a general supervision of the wounded, in examining personally, so far as can be done, all the wounded, whether on the field, during or after a battle, in a general or other hospital, or at any dépôt for the wounded, and to decide as to the primary surgical treatment in the cases presented; and, if any operation is deemed necessary, to direct a suitable person to perform it, and at the proper time; and, furthermore, that no important operation, such as amputation of the large limbs, ligature of any of the principal arteries, or excision of bone, should be performed, except under great sudden emergency, till one or more members of this supervisory board shall have given his or their approval."

In his reply the Surgeon-General acknowledges the in-

competence of many medical officers, and states that he has made every effort to secure qualified surgeons to superintend the operations on the battle-field, but without success. He adds: "I am free to confess that first class surgeons have not come forward for field service with the alacrity that is to be desired."

This is a subject of very grave importance, and one to which we have repeatedly called attention. The spasmodic and wholly unorganized efforts which are made by surgeons in civil practice *after* great battles, have resulted in little else than great discomfort and inconvenience to those who have visited the battle-field. What is required is the selection of a sufficient number of experienced and thoroughly competent surgeons in different parts of the country who shall be in readiness at the summons of the Surgeon-General to visit the battle-field *before* the engagement, and to remain while their services are required. Such surgeons should have pay sufficient to compensate them for their personal sacrifices, and, if possible, such rank as will make their position respectable. Is not this a proper subject for the Sanitary Commission? Our Boston brethren have been active in every good work during the war, and we hope they will be able, in concert with the Surgeon-General, to devise a plan by which the best surgical talent of the country can be made available on future battle-fields.

In this number we conclude Prof. Clark's papers on Alhuminuria. They form one of the most important contributions yet made to this subject, and have widely attracted the attention of the profession.

Army Medical Intelligence.

THE SERVICE OF THE FLOATING HOSPITAL "EUTERPE."

[To the Editor of the American Medical Times.]

Sir:—The Euterpe is a 2,000 ton clipper ship with only two decks. This peculiarity of construction in a vessel of her size gives an unusual air-space between decks; there being ten feet in the clear from the main to the spar deck. She is, without doubt, one of the most seaworthy and the steadiest vessel in a high sea, whether at anchor or in motion, that has ever been built. Her spar deck is very well arranged with hospital kitchen, mess rooms, officers' and nurses' quarters, dispensary, and cold and hot water reservoirs, etc., etc. Her main deck, which is most admirably adapted for general hospital purposes, as might be inferred from the large space between decks, has been very completely fitted up with the appliances and conveniences required in a well arranged hospital. This will accommodate two hundred and fifty patients, and give them all the benefits and comforts of a hospital. There are one hundred and eighty-six stationary bunks in tiers three high, and an abundant floor area for sixty-four movable cots, which do not interfere with easy access to every bed. Consequently the hospital will accommodate, with proper distribution, two hundred and fifty cases of the most serious average character which ever demand hospital accommodation. Beneath the hospital deck is an ample space for the requisite hospital stores, furniture, and general supplies, which is conveniently arranged with storerooms and compartments. The "Euterpe" actually began service about the middle of July, at Fort Monroe, when two hundred and twenty-two severe cases of sick and wounded soldiers were admitted into the hospital to be transported to New York. These were brought to this place during a heavy north-east storm in tow of the steamship Vanderbilt, and the unanimous statement of the patients was that they had enjoyed the comforts and conveniences of a hospital without any unpleasant experience of the sea movement. This was also confirmed by Dr. Sloan, Medical Director, who stated that he had never seen before the same number of serious cases arrive at this port in such a satisfactory condition, or a hospital transport in so excellent a sanitary state. After discharging the patients, the "Euterpe" returned to Fort Monroe on the 1st of August. On the 6th of August one hundred and forty-four grave cases from Richmond, which were mostly surgical, were admitted into the hospital. These patients were in a very prostrated condition, and the wounds generally sloughing or inflamed to a high degree, resulting from the improper surgical treatment received and the rough transportation undergone. Three days after the receipt of these patients the "heated term" of August began, and continued about a fortnight. During this period, with more than a hundred profusely suppurating wounds, and hospital and other diseases, such as dysentery, peninsular fever, etc., there was not a single case of infection originating in the wards, although one case of erysipelas had been received and not isolated. The temperature also of the hospital was several degrees lower than in any shore hospital in the vicinity of Fort Monroe. There was likewise a thorough circulation of the atmosphere maintained by the numerous ventilators and wind sails, so arranged as to inject strong currents of air, and the abundant escapes through side-ports and hatches; so that in any respect the sanitary condition of the Hospital "Euterpe" compared most favorably with any hospital that has come under my observation. On the 27th of August ninety-eight patients were received who had been under treatment in the Portsmouth Hospital. The majority of these were severe surgical cases, and a large percentage of them were suppurating wounds, which were generally in a sloughing or inflamed state. Two cases of "erysipelas," also, were included in this number, and one case of hospital gangrene. During the after treatment of these two hundred and forty-two cases the sanitary constitution of the hospital was maintained in the most satisfactory manner, and the progress of the surgical cases, also, was quite as favorable as in any well regulated hospital. There was not a case of erysipelas or hospital gangrene originating from those introduced, and every inflamed sloughing wound, except the case of hospital gangrene, rapidly improved and assumed a healing character. The results obtained from the treatment of the two hundred and forty-two cases alluded to were, on the 1st of October, as follows:—One hundred and thirty were returned to duty as convalescents cured; forty-one were discharged from service as permanently disabled; twenty-eight died, and forty-three convalescents remained in hospital. Among these cases are many interesting and novel surgical incidents, which hereafter I shall take occasion to communicate through the medium of your journal. During the month of September the "Euterpe," being at anchor in Hampton Roads, was exposed to the equinoctial and autumnal storms, but on no occasion were the patients disturbed by the motion of the vessel, which was always very slight comparatively. On the 10th of October patients began again to be admitted from the hospitals in the vicinity of Fort Monroe, and on the 18th the complement of two hundred and fifty having been received in hospital, I proceeded with the "Euterpe" to New York, and arrived on the 20th with the patients and hospital in excellent condition.

Thus terminated the service of the "Euterpe" as a Transport and Floating Hospital under my administration, and I can state that it has been an exceedingly gratifying experience. In conclusion I think the "Euterpe" has been fully tested as a Floating Hospital as well as a Transport, and has proved a perfect success. There is now no doubt in my mind that it is feasible to have Floating Hospitals, which will be as convenient and produce as favorable re-

sults as any land hospitals. And in my opinion there is a service of vital importance for which Floating Hospitals are especially adapted, and might recompense for the large outlay. I refer to those occasions where military operations are being conducted in proximity to the sea, bays, or large water courses, and are liable to sudden change of locality. There, general hospitals, which can be moved without disturbance of the patient, would be of the greatest consideration and benefit. I cannot close without stating that much of the success of the "Euterpe's" service was owing to the efficient cooperation of my associates as Assistant Surgeons, who were the following gentlemen:—Geo. F. Shrady, J. B. Ponce de Leon, B. L. B. Baylies, New York; Calvin Ellis, John Stearns, Haskett Derby, Boston; J. T. Day, 10th Maine; Evelyn Bissell, 5th Coun.

Yours, etc.,
J. King Merritt,
Late Surgeon in Charge.

BATTLE OF CORINTH—REPORT OF MEDICAL DIRECTOR CAMPBELL.

Head-Quarters Army of the Mi s.
Corinth, Miss. Oct. 24, 1862.

General:—In anticipation of an engagement with the enemy on the 2 1 of October, upon information derived from the Engineer Department, I selected the large building recently constructed for a Commissary Depôt, as the place best protected by the nature of the grouud and the safest for hospital purposes.

The men furnished by the Quartermaster worked expeditiously, and everything was prepared. Medicines, instruments, cots, and buckets of water were ready for some time before the first wounded man was brought in.

It became evident in a short time that the building, though a very large one, would be altogether too small. According to your order issued upon my recommeudation, I then took possession of the Tishimingo Hotel, and when it was full, of the Corinth House, as hospitals, preparation having been made in the morning for that purpose.

All the surgeons worked diligently, and by six o'clock the wounded were all comfortably disposed of, and their wounds dressed.

At three o'clock next morning I received your order to remove all the wounded to Camp Corral. By six A. M. they were all collected into the new hospital. The ambulances then went to the scene of action to bring off those recently fallen.

I am particularly indebted to Surgeon J. L. Crane, Medical Director of Stanley's Division, who superintended the arrangement and pitching of the tents, and to Surgeon H. Wardner, Medical Director of Davies' Division, who received and disposed of the wounded as they arrived on both days.

I found on the R. R. platform a large number of tents, which I took possession of, and used. The battle ceased just before noon, and by night all the wounded were under shelter, their wounds dressed, and provided with co s.

I have to compliment all the surgeons for their kindness, energy, and indefatigable endurance. Surgeon E. Winchester, 52d Ill. Vols., in charge of the Corinth House, Surgeon S. P. Carpenter, 5th Iowa, in charge of the Tishimingo Hotel, and Dr. Swaring, at the Commissary Building, remained until the last man and all the property had been loaded and removed to the newly-selected hospital.

The wounded, being thoroughly arranged and cared for, were turned over on Sunday morning, 4th inst., to Surgeon Norman Gay, in charge of the General Hospital, an ample supply of Medical Officers was left to take charge of them, and the Surgeons of Divisions and Regiments, with one Assistant to each regiment, reported back to their commands, and joined in the pursuit of the enemy, which occupied from eight to ten days.

I have to state that there was neglect on the part of the rebel surgeons for their wounded The surgeon placed by Van Dorn in charge of over one hundred wounded at Ripley, neglected to make out a requisition, with the assurance that all he needed would be delivered to him within forty-eight hours. Everything that has been called for from their large hospital at Iuka, and the other hospitals within our lines, has been furnished them on your order, except blankets, of which our supply ran short. They received the last on hand; the balance will be sent as soon as possible.

It is due Private H. B. Douglas, Co. A, 36th Ill. Volunteers, who acted as my orderly, both in this battle and that at Iuka, to say that no man was exposed to more danger, or could exhibit more bravery than he did, in the performance of his duty.

Herewith annexed is a list of the names of the killed, wounded, missing, and prisoners:—

	Officers.	N. C. O.	Privates.	Total.
Killed, ...	32	60	223	315
Wounded, . . .	86	276	1450	1812
Missing, ...	3	12	200	215
Prisoners, . . .			17	17
Total, . . .	121	348	1890	2359

The loss of the enemy, calculated from the best sources of information within my reach, was 1423 buried; 3000 prisoners, including their wounded, left in our hands; 5000 wounded taken away, and dropped by the wayside, making 9423.

Very respectfully your obedient serv't,
A. B. Campbell,
Med. Director, Army Mississippi.

Medical News.

TRIBUTE TO THE MEMORY OF JOHN C. CHEESMAN, M.D.

At a quarterly meeting of the Trustees of the College of Physicians and Surgeons in the city of New York, held on Tuesday, Nov. 11, 1862, the following resolutions were unanimously adopted:—

Resolved, That the Board of Trustees of the College do hereby offer a tribute of respect to the memory of their Senior Fellow Trustee, John C. Cheesman, M.D., deceased on the 11th ultimo.

For nearly fifty years a distinguished practitioner of medicine in this city, and for thirty-five years a member of this Board, he has uniformly proved himself a steadfast friend of the College, and promoted its prosperity by his influence.

Resolved, That in common with an extensive circle of confiding friends, this Board regards the decease of one so eminently skilful and successful in the practice of his profession, as was Dr. Cheesman, as a great public loss.

Resolved, That the Board beg leave hereby to express to the family of the deceased their sincere sympathy with them in their bereavement.

Resolved, That the Registrar be requested to communicate a copy of these resolutions to the family of Dr. Cheesman.

West Philadelphia General Hospital.—A new Department has recently been organized in this model Military Hospital, for the treatment of diseases of the eye, and placed under the care of Dr. Ezra Dyer as its surgeon. This hospital appears to be a favorite institution of Surgeon-General Hammond, who draughted the plans, had a supervision of its construction, and personally selected its corps of surgeons.

The contractility of the large veins, and especially of the inferior and superior venæ cavæ at their openings into the heart, in some lower vertebrata, has long been known; but now M. Colin informs us that the venæ cavæ of mammalia, at their openings into the heart, possess rhythmic and pulsatile movements similar to those pointed out by M. Flourens as existing in the veins of batrachia.—*British Medical Journal.*

Original Lectures.

LECTURES

ON THE

DIAGNOSIS OF DISEASES OF THE HEART.

DELIVERED AT THE

BELLEVUE HOSPITAL MEDICAL COLLEGE DURING THE PRELIMINARY TERM.

Session 1862-63.

By AUSTIN FLINT, M.D.

PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE VII.—PART II.

Diagnosis of Inflammatory Affections of the Heart.—Physical Signs in Pericarditis.—Pericardial Friction-Sound or Exocardial Murmur.—Characters by which it is Discriminated from Endocardial Murmurs.—Symptoms in Pericarditis.—Mode of Ascertaining Distension of the Pericardial Sac by Physical Signs, and Discriminating it from Enlargement of the Heart.—Modification of the Heart-Sounds by Pericardial Effusion.—Diagnosis of Chronic Pericarditis, with Large Effusion.—Cardiac Pleural Friction-Sound.

I come lastly, gentlemen, to consider the diagnosis of the inflammatory affections of the heart. The investing serous membrane, the pericardium, is liable to inflammation, constituting *pericarditis;* and the lining membrane of the cavities, the endocardium, is still oftener inflamed, constituting *endocarditis.* Inflammation of the muscular walls, *carditis,* is so exceedingly rare, that it would be of very little practical consequence to consider it, more especially since the diagnosis is impossible. I shall ask your attention, then, to the means of determining the existence of pericarditis and endocarditis, considering, first, the former of these affections.

The diagnosis of pericarditis rests almost exclusively on physical signs. These have been established since the time of Laennec. Laennec declared that the existence of this disease might be conjectured, but not positively determined. The researches of those who have followed in his footsteps have led to the knowledge of signs by means of which the diagnosis may be made with positiveness, certainly in the great majority of cases. Before we are prepared to understand the diagnostic signs of pericarditis, we must have a clear apprehension of the physical conditions which these signs represent. What is the physical condition in the first stage of this disease?

The pericardium is a serous membrane, and the appreciable effects of inflammation here are essentially the same as when other serous membranes are inflamed. We have, as an immediate or speedy effect, the exudation of liquor sanguinis, with coagulation of fibrin, constituting coagulable lymph, and the accumulation of serum in the pericardial sac. Before the serum has accumulated sufficiently to distend the sac, coagulable lymph is more or less diffused over the free surfaces of the membrane. The first stage may be reckoned from the development of inflammation, to the accumulation of liquid sufficiently to be made apparent by physical signs. The physical condition, then, in the first stage, which furnishes a diagnostic sign, is the presence of newly exuded lymph on the free surfaces of the membrane. This gives rise to the sign, obtained by auscultation, generally called the cardiac or pericardial friction sound; called, also, the attrition sound, or the to-and-fro sound, and, as distinguished from the murmurs produced within the heart (endocardial), it is called the *exocardial* murmur.

On the table before me are several specimens illustrating the morbid appearances due to recently exuded lymph. You will perceive, by examining the specimens, the diversity of appearances caused by the different modes in which the lymph is disposed on the pericardial surfaces; in some producing a shaggy appearance, in others giving rise to a reticulated or honey-combed arrangement, and in others forming ridges. Here is a specimen which was obtained just before the commencement of my course. The pericardial sac, in this case, contained a large amount of liquid, and the whole surface of the heart was covered with lymph, leaving irregular depressions and ridges.

The rationale of the friction sound is sufficiently intelligible. We have seen that, during the systole of the heart, the apex moves from left to right, the organ elongates and rotates from left to right; these movements, of course, are reversed during the diastole. The systolic and diastolic movements involve the rubbing together, with more or less force, of the visceral and parietal surfaces of the pericardium. In health the rubbing together of these surfaces occasions no sound, owing to the smoothness of the membrane, which is polished and moist to facilitate freedom of motion. But when roughened by the presence of lymph, the friction is attended by sound—the friction sound—which varies in intensity and quality, according to the amount of lymph, its disposition, its diversity, the quantity of liquid effusion, and the force of the heart's action. A friction-sound almost invariably attends the first stage of pericarditis. In this respect pericarditis differs from pleuritis, the pleural friction-sound in the first stage of the latter affection being much oftener wanting. So uniformly is the pericardial friction-sound present in the first stage of pericarditis, that we may decide with much positiveness on the absence of the disease if this sign be absent.

What are the characters by which the pericardial friction-sound is distinguished? It is to be discriminated from the endocardial murmurs, and generally this discrimination is made without difficulty; but in some cases there is a liability to error without attention to the distinctive characters which I will proceed to mention.

A pericardial friction-sound is almost always double; that is, there are two sounds for each beat of the heart, one produced by the systolic, and the other by the diastolic movements. The systolic is the louder of the two sounds. This point is by no means distinctive, for, in certain cases of aortic lesions, we have a systolic and diastolic murmur. The liability of confounding exocardial and endocardial murmurs is chiefly in mistaking the aortic direct and aortic regurgitant murmurs for friction sounds, or *vice versâ.*

The quality of friction-sounds generally denotes friction, or the rubbing together of surfaces which are not smooth. This quality differs in different cases. The sounds sometimes denote only slight grazing; in other cases they are more distinctly rubbing; in other cases they are rough, and may be described as rasping or grating sounds. These characters are somewhat distinctive, but it would not be safe to rely upon them exclusively. For the endocardial murmurs sometimes closely resemble friction-sounds in quality.

A point of much importance in this discrimination is the apparent superficial situation of friction-sounds. They seem to be very near the ear, and even to come from the surface, so that sometimes the auscultator looks to see if they may not be produced by the dress of the patient coming into contact with the stethoscope. Endocardial murmurs appear to have a deeper source, or to come from a greater distance.

Another point pertains to the situation in which they are heard. Friction-sounds are usually not propagated beyond the præcordia; frequently they are limited to the superficial cardiac space, and sometimes to the upper part of this space. On the contrary, endocardial murmurs are generally loudest beyond the borders of the heart, and are often propagated to a considerable distance from the præcordia. The aortic direct murmur is heard best above the heart, and extends upwards towards the summit of the chest, and the mitral regurgitant murmur is best heard without the apex, and is diffused to a greater or less extent around the chest. Limitation to the præcordia, or to a portion of this region, then, is one of the differential points involved in the discrimination.

Another point is the intensification of the sounds by pressure with the stethoscope. This is generally marked. In proportion as the pressure with the stethoscope is strong, the sounds are intensified. This is not true to the same extent of the endocardial murmurs; these are rendered louder by pressure only in so far as the pressure promotes conduction, while the exocardial murmur becomes actually more intense.

Lastly, differential points relate to the fluctuations of friction-sounds and their relations to the normal sounds of the heart. Friction-sounds are apt to vary with different beats of the heart, being sometimes feeble, sometimes loud, and occasionally wanting. Endocardial murmurs are more constant and uniform, varying but little with the successive beats of the heart. Each of the endocardial murmurs, as we have seen, has a definite relation as regards the time of its occurrence, to either the first or the second sound of the heart, and this relation is preserved without variation. But friction-sounds have not the same fixed relations to the sounds of the heart. They are liable to occur, so to speak, discordantly as regards the heart-sounds, that is, not having the same precise and uniform connexions with these sounds as the endocardial murmurs.

Having determined the existence of a pericardial friction-sound, in conjunction with symptoms which denote the occurrence of inflammation within the chest, the diagnosis of pericarditis is made out. The symptoms are not distinctive of this inflammation. If the inflammation be acute, the patient has sharp, lancinating pain, referable to the præcordia, aggravated by the acts of breathing, and resembling the pain of acute pleurisy. Painful, suppressed cough, such as exists in acute pleurisy, may be present. There is more or less febrile movement. The symptoms, in short, so closely resemble those of pleurisy, that the latter affection is supposed to exist by those who do not avail themselves of physical exploration. The two diseases, pleurisy and pericarditis, in fact, are not unfrequently combined, and the latter affection is then sure to be overlooked if only the symptoms are considered. In exploring the chest in cases of pneumonia, we are to bear in mind that pericarditis is not very unfrequently a complication of that disease, and we are to satisfy ourselves as regards the presence or absence of the pericardial friction-sound.

I pass now to consider the diagnosis of pericarditis in the second stage of the disease. The second stage dates from the accumulation of liquid effusion in sufficient quantity to be appreciable by means of physical signs, and this stage continues until marked progress has been made in the absorption of the effused liquid. From the latter period to the period of convalescence, we may reckon as the third stage, or stage of absorption; the middle stage we may call the stage of effusion.

The friction-sound may continue during the second stage, notwithstanding the accumulation of a large amount of liquid. This was illustrated in the case recently under observation, which furnished one of the morbid specimens before me. It was estimated that the pericardial sac, in that case, contained from twenty to thirty ounces of liquid; yet a loud friction-sound persisted to the end of life. In some cases, however, a friction-sound which had existed in the first stage disappears in the second stage. In the latter stage, then, we may or may not have the presence of this sign to guide us in the diagnosis. The diagnosis may be made in this stage without the advantage of the friction-sound. The diagnostic signs are those which denote distension of the pericardial sac.

In illustrating certain anatomical points in my first lecture, I called your attention to the form of the sac inclosing the heart. When distended it becomes a pear-shaped body; the space which it occupies, represented on the chest, is triangular, the base being below and the apex above. You will recollect that I pointed out the fact of the attachment of the sac being, not to the heart at its base, but to the great vessels two or three inches above the base of the heart. Hence, when distended, the apex rises nearly or quite to the sternal notch, while the base of the sac is not much below the normal situation of the apex of the heart. Now, during the stage of effusion in pericarditis the pericardial sac is generally distended with liquid, and the space which it occupies is readily determined by percussion. Dulness or flatness exists in the pericardial region, within a triangular space which corresponds to the space occupied by the distended pericardium. Take, for example, the recent case which furnished the specimen before me. The space occupied by the distended pericardium, in this case, was delineated on the chest. The apex of the triangle reached nearly to the sternal notch; the base was a horizontal line between the sixth and seventh ribs; the left border of the triangle fell a little without the left nipple, and the right border fell a short distance within the right nipple. The borders of the distended sac are easily determined by percussion, because the dulness is increased in degree amounting frequently to flatness. We may also determine the borders by means of auscultation, which shows extinction of vocal resonance within a triangular space corresponding to the distended sac.

Increased extent and degree of dulness exist, as we have seen, in enlargement of the heart. Are not enlargement of the heart and distension of the pericardial sac, then, liable to be confounded? We avoid this error by bearing in mind the difference in the situation of the increased dulness in the two cases. When the heart is enlarged the base of the organ rises but little higher than its normal situation at the third rib, but it extends downwards and to the left; the increased area of dulness is, of course, in the same direction. On the contrary, as just seen, when the pericardial sac is distended, it extends but little below its normal situation at the fifth intercostal space, but it extends upwards towards the sternal notch.

Let me illustrate the points just stated by diagnosis on the chest of a living healthy subject. Suppose this person to have the pericardial sac distended with liquid; the pyriform tumor would occupy a space which I now delineate with ink. Now suppose him to have enlargement of the heart with the apex beating in the seventh intercostal space an inch without the nipple; I delineate with ink the space occupied by the enlarged organ. I have thus produced two diagrams on the chest, and you see how they differ as regards their forms and relative situations.

Other signs, during the stage of effusion in pericarditis, relate to the apex beat. When the liquid has accumulated sufficiently to distend the sac, the apex-beat is apt to be suppressed. Prior to the accumulation of liquid the apex-beat is generally abnormally strong. Its suppression, therefore, becomes a sign of effusion. If not suppressed it is enfeebled, and its situation raised; if felt at all it is generally felt in the fourth intercostal space. It may sometimes be felt by inclining the body of the patient forward, when it is inappreciable if the body be in the recumbent or vertical position.

The heart-sounds are modified by the presence of a considerable quantity of liquid. Both sounds are enfeebled, and seem to come from a greater distance than in health. The first sound loses its element of impulsion, becoming short and valvular like the second sound, and less intense. These modifications are sufficiently intelligible.

The pericardial region may be enlarged so as to be distinctly prominent. The intercostal spaces may be pushed out to the level of the ribs. These appearances alone point strongly to pericarditis with effusion.

The diminution of liquid in the pericardial sac is readily ascertained by means of percussion. Sometimes it is absorbed with such rapidity that the area of dulness is notably diminished on successive days; in other cases, the progress of removal is more slow, and sometimes the quantity fluctuates, being now more and now less. As the liquid disappears, the apex-beat returns if it have been suppressed, and becomes more and more apparent. The friction-sound reappears if it have disappeared during the second stage, and becomes louder if it have persisted through that stage.

This sign continues until agglutination or adhesion of the pericardial surfaces has taken place. It may continue not only during the stage of absorption, but into convalescence.

The symptoms, during the stage of effusion, are not more distinctive than during the first stage. The pain diminishes or ceases. The patient suffers from a distressing sense of oppression due to the compression of the heart. He is liable to syncope from any exertion. I have known sudden death to follow the effort of getting out of bed. Dyspnœa exists to a greater or less extent. The pulse is small and feeble. The surface of the body may present venous congestion. But all these symptoms are found in other intra-thoracic affections; and I repeat, the diagnosis of this disease is based almost exclusively on physical signs.

A few words, in conclusion, respecting chronic pericarditis with effusion. Chronic inflammation of the pericardium, as of other serous membranes, either following the acute disease or subacute from the beginning, may lead to a large amount of effusion. The pericardial sac becomes, not merely distended, but dilated, and it has been found to contain a gallon of liquid. In proportion as the sac undergoes dilatation it loses its pyriform shape, and increases especially in width. The lateral borders of the dilated sac may extend nearly, or quite, to the *linea axillaris*, or the centre of the lateral surface of the chest on either side. Under these circumstances, physical exploration suffices to show that the accumulation of liquid is in the pericardial sac. Dulness or flatness extends anteriorly on both sides, to a greater or less extent from the sternum, and beyond the limits of the dulness or flatness, on both sides, pulmonary resonance is found, and also at the base of the chest behind on both sides. This excludes pleurisy with effusion. The apex-beat, as a rule, is suppressed. The sounds of the heart are feeble and distant, the first sound resembling the second in duration and quality, and weaker than the second sound; and, in some cases, even with a very large accumulation of liquid, the diagnosis is confirmed by a friction-sound.

With reference to the friction-sound, it is proper that I should mention a source of fallacy which is occasionally met with. In a case of pleurisy affecting the left side, without pericarditis, the movements of the heart sometimes cause a rubbing of the external surface of the fibrous sac inclosing the heart, against the adjacent pleura roughened with lymph, and a friction sound is in this way produced. It is a cardiac friction-sound, that is, it is produced by the movements of the heart; it may be double, corresponding with the rhythm of the heart's movements, and not suspended by holding the breath, as is a pleural friction-sound dependent on the respiratory movements. The friction sound referred to, is a *cardiac pleural friction-sound*. I have met with this fallacious sign in a few instances. Its occurrence in some cases of pleurisy affecting the left side, should lead us to hesitate in resting the diagnosis of pericarditis, as a complication, exclusively on the presence of a friction-sound.

M. Maisonneuve informs the Academy of one of his cases operated on by the *diaclastic method*. A woman in the Hôtel Dieu had an anchylosis, resulting from fracture of the neck of the thigh, and was thereby prevented from walking. The "*hardi*" surgeon broke the anchylosis, and cured the patient. The *voluntary* fracture made by his diaclastic apparatus was performed, we are told, without producing sphinterings, or any injury to the soft parts.—*Brit. Jour.*

M. Charcot relates a case of exophthalmie goître, in which all the symptoms were most favorably modified or arrested by the puerperal state. It appears that the same results have been observed in three cases recorded, in which the women became *enceinte* while suffering under this affection.—*Brit. Jour.*

M. Chassaignac has communicated to the Société de Chirurgie a case of false aneurism of the femoral artery cured by digital compression in seven hours.—*Brit. Med. Jour.*

Original Communications.

CAN PREGNANCY FOLLOW DEFLORATION IN RAPE, WHEN FORCE SIMPLY IS USED?

By EDMUND S. F. ARNOLD, M.D.,

of Yonkers, N. Y.

Having lately been called upon to give evidence in a case of bastardy, in which it was averred by the female that she was violated after making all the resistance in her power, that she had not fainted nor lost her senses, nor had any draught or drugs been administered, nor threats made, that intercourse was had a second time the same night, that she had never had sexual intercourse with any one before or since, that she had been delivered of a child nine months after, and consequently that the ravisher was the father of the child: I testified, firstly, knowing both parties, that I did not consider it possible that the man could have accomplished the act, if she had resisted as long and as powerfully as she was able; and secondly, on being asked whether it were possible that pregnancy could follow rape, answered that it was perhaps possible, but very improbable. To controvert this last opinion East was quoted, who says: "It was formerly supposed that if a woman conceived it was no rape, because that showed her consent; but it is now admitted on all hands, that such an opinion has no sort of foundation either in reason or law." Taylor also says: "Such a question requires no discussion in the present day. Conception, it is well known, does not depend on the consciousness or volition of a female. *If the state of the uterine organs be in a condition favorable to impregnation*, this may take place as readily as if the intercourse was voluntary."

What I want to attempt to show in this article is, that in truly forcible violation, as alleged above, the uterine organs cannot well be in a condition favorable to impregnation. I may here state, once for all, that my arguments apply to such cases only. Maybe they are not new, but I do not find anything bearing on this class of cases in Beck or Taylor, otherwise than that in the former work it says of Bartley's opinion on the subject: "The scope of his argument is, that the depressing passions, such as fear, terror, etc., will prevent the necessary orgasm from occurring." That is also the ground I shall take.

It is asserted in proof of pregnancy following rape, that females have conceived while under the influence of narcotics, of intoxication, and even of asphyxia—admitted. It is asserted also that the functions of the uterine system are in a great degree independent of the will, and I admit that also, the uterus being mainly dependent on the organic nervous system, not on the voluntary. We find the uterus as little affected by any of the above influences during the whole after period of gestation. A woman may be intoxicated frequently, may be almost poisoned with narcotics without disturbing gestation, unless it be by poisoning the source of nourishment of the fœtus and so destroying it; while by many the use of chloroform or other anæsthetics, is believed to promote the healthy action of the uterus during parturition, by relieving pain and the removal of disturbing causes, while destroying the will and relaxing impeding muscles dependent immediately on the cerebro-spinal system. So little has sensation or volition to do with the matter, that Carpenter observes: "It is an interesting fact, which has been more than once observed, that the fœtus may be expelled from the dying body of the mother even after the respiratory movements have ceased." Thus we see from first to last, that those agents which are not calculated to prevent conception, exert as little influence during the whole after period of gestation.

I can even believe that impregnation may follow defloration more readily when soporifics are administered than when not, just by the removal of those disturbing influences which

seem not only to render the uterus incapable of conceiving, but which we know positively to exert a most powerful influence on that organ during the subsequent period of pregnancy, viz. terror, distressing emotions, or whatever produces a severe shock to the general nervous system. Mark what the same East, already quoted, says: "It has been inquired whether pregnancy may follow defloration? I apprehend that this is to be answered in the affirmative, although the instances are comparatively rare." Comparatively rare where there is consent, for the evidences here are mainly to be sought in married life. We undoubtedly meet occasionally with a case where there is reason to suppose conception has resulted from defloration. Within a very short period, a patient in labor innocently remarked: "I did not think I could have been sick so soon, it was only nine months yesterday since I was married." But I think it will be found to be the general experience of medical men, that such cases are rather the exception than the rule. Besides, some are less affected by the influences under discussion than others, in some they may not be called into action at all, and in such cases a woman may be in as favorable a condition for impregnation as at any future time. Ten months after marriage, or later, are the more common periods at which women bear their first fully matured child; hence it would seem that a certain period is required in most cases to overcome some disturbing causes, which have a direct influence in preventing the conception, whatever they may be. In the domestic animals impregnation is as certain to occur at the first coitus as at a future time; why not then also in the human female, unless emotional influences, absent in the former, but prevailing in different degrees of intensity in the latter, disturb materially the organic nervous system, upon an underanged condition of which the uterus is dependent for the proper performance of its functions when specially called into action.

If conception is infrequent as a result of defloration in virtuous females where there is consent, how much more likely is it to be rare when a strong man overpowers a weak woman, where in the former the coarser and more brutal passions are brought into play, culminating in violence even more than necessary to accomplish the crime, while in the latter, repugnance, terror, pain, and bruising of parts, violent resistance succeeded by almost total prostration, all contribute to cause severe shock to the organic nervous system, so deranging it as to deprive, for the time, the uterus of that supply of healthy nervous influence necessary for the due performance of its functions, often so affecting the entire system as subsequently to lead to fevers, violent hysteria, or even eclampsia. I believe it to be as impossible for a woman to conceive while under the influence of terror, shock, and nervous exhaustion, as it would be for a man to perform the act of intercourse while prostrated by similar agencies.

As might be supposed, the same influences affect powerfully the uterus during the whole after period of gestation. What is more likely to produce miscarriage than a fright, or any sudden shock to the nervous system? Is it then reasonable to suppose, that while terror, or strong and painful emotions, especially those of a sudden character, will affect the uterus so powerfully as to cause it to lose its contents, that it can be independent of them during coitus; that it shall, in fact, be independent of them at one moment only to become peculiarly sensitive to them from that time forward?

While then the uterus is admitted to be sufficiently independent of the mere will, it certainly cannot be proved that conception may occur during a first and forcible coitus, by citing cases to show that it may follow the exhibition of narcotics or sedatives; on the contrary, to reach such a case as I have started with at the commencement of this article, we have to show that it may occur under circumstances of an entirely opposite character, viz. those of intense and overwhelming excitement of a painful kind. I can believe that a woman of virtuous impulses may be so overcome by passion excited in resisting a sudden assault, that a vigorous opposition may subside into passive submission, and that impregnation may result, but then she becomes a consenting party in the eye of the law. It is not a rape. I can also readily conceive that, impelled by shame, she may stoutly assert that she had resisted to the extent of her power, and her antecedents and subsequent conduct may lend undue weight to her statements in the absence of positive proof, which it is impossible to obtain. The older writers, then, may not be so far wrong after all, when they assert that pregnancy shows consent (at least where no other means than actual exertion of strength to accomplish the act are used), that is, such consent as would reduce the crime from that of rape in law to a mere assault.

Yonkers, N. Y., Nov. 11, 1862.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By AUSTIN FLINT, M.D.,

PROF. OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

Mr. President—After the extended, comprehensive, and instructive discourses recently delivered in this place,* I could hardly have consented to address the Academy, save with the understanding that my function is simply to open a discussion of the subject. With this understanding I shall not trespass long on the patience of the fellows who are present, and shall aim only to present some of the more important of the practical questions relating to the pathology and causation of albuminuria, giving, as concisely as possible, the views relating thereto, which appear to my mind most consistent with our present knowledge. As regards the discourses referred to, let me express congratulations that Prof. Clark has been induced to bring before the Academy his elaborate researches, especially on the morbid anatomy of the kidney, and that they are now placed before the profession in a form available, not only by the present generation, but by those who are to come after us.

The first question which suggests itself, has reference to the scope of the term albuminuria; what is meant by this term? When Dr. Bright published his discovery in 1827, and for some time afterwards, it was supposed that albumen in the urine always denotes disease of the kidneys. It is now well known that albumen in the urine occurs incidentally in a host of affections. Albumen is found in the urine occasionally in all the essential fevers, in scorbutus, in pneumonia, in diabetes, etc., etc. It is a symptom like cephalalgia, for example, which, although a prominent feature of acute meningitis, is yet common to numerous diseases. As a rule, when albuminuria occurs, thus, as an incidental symptom, or accident, the quantity is small and it is of transient duration. On the other hand, it is by no means always abundant, and it is not always present in connexion with those morbid conditions of the kidneys which, for lack of a more distinctive name and as a proper tribute to the discoverer, are embraced under the title of Bright's disease. In the present discussion, the term albuminuria is used as expressing an affection or affections of the kidneys, not merely a symptom occurring in other pathological connexions. It is to be limited to cases in which, from the quantity or continuance of albumen in the urine, and other associated events, certain morbid conditions of the kidneys are represented, and also it is applied to cases in which these conditions exist, although albumen may not be contained in the urine.

The next question which arises is—What are the morbid conditions of the kidneys usually represented by albuminuria, or comprehended by the name of Bright's disease?

The morbid appearances, gross and microscopical, have been very fully considered by the distinguished fellow who has preceded me, and who, as is well known, has devoted to them special research. It would not only be superfluous but presuming in me to undertake to go into this branch of the subject, more especially as regards the microscopical ap-

* By Prof. Alonzo Clark.

pearances, inasmuch as I cannot claim to have been a worker with the microscope to much extent. To the student of medicine and medical reader, the morbid anatomy of Bright's disease is apt to present considerable complexity, not to say confusion, owing to the discrepancy in the views of different observers as regards the various forms of the disease. Bright himself describes three forms; Christison recognised the same number; Martin Solon, of Paris, has described five varieties; Rayer six, and Rokitansky has extended the number to eight. These divisions are based mainly on differences in the gross appearances. More recently Dr. George Johnson, of London, basing his divisions in a great measure, on microscopical appearances, considers that there exist five different forms. In a practical point of view, however, the important inquiry is—What are the *immediate pathological effects* of the conditions giving rise to such a diversity of appearances? Directing attention to this inquiry, there is far less complexity than in considering the morbid conditions in a purely anatomical point of view. It seems to me that the immediate pathological effects of these conditions are resolvable into two classes, viz. *First*, interference with the secretory function of the kidneys, especially as regards the elimination of urea. *Second*, interference with the circulation in the kidneys. Let us consider, briefly, how these two classes of immediate effects are produced.

How is the secretory function interfered with? In two modes. One mode is the obstruction or plugging of the convoluted tubes. The presence of fibrinous moulds in the tubes, the accumulation of epithelium, of granular matter, of fat, of that unknown deposit called lardaceous or amylaceous, may interfere with secretion simply by producing pressure on the secreting cells, these remaining intact. The operation is mechanical. Another mode is the disintegration and destruction, to a greater or less extent, of the secreting tissue. In certain cases the epithelium of the tubes is injured or lost, the tubes sometimes being completely denuded of their epithelial lining.

How is the circulation of the kidney interfered with? Here, also, in two modes. One mode is, the pressure of morbid products on the intertubular veins, sometimes called the portal veins of the kidney, the morbid products being fibrin, epithelium, granules, and other deposits either within the tubes, in the intertubular spaces, or in both situations; and as a consequence of this pressure, congestion of these veins, and especially of the Malpighian tufts. The other mode involves the dependence of the circulation on the functional activity of the kidneys. If the secretion be diminished, congestion is induced in accordance with a general law, viz. that whenever in any organ the function of that organ is interfered with, the interference extends to the circulation. Take, for example, the lungs; if, from any cause, apnœa be produced, these organs become congested. Much importance is attached by Johnson and others to congestion produced in this way by pathological conditions of the kidneys interfering with their secretory function.

We may here trace the consequences of the morbid conditions of the kidneys a step further onward. The immediate pathological effects just considered give rise to two classes of ulterior effects. *First*, uræmia. This ulterior effect is attributable to the non-secretion of urea. The urea, being preformed in the blood, if not eliminated by the kidneys, or vicariously by some other organ, is of course retained in the blood, and accumulating, gives rise to the morbid condition known as uræmia. *Second*, the presence of albumen in the urine. This ulterior effect is attributable to interference with the circulation in the kidneys. Instead of the transudation of water holding in solution the saline constituents of the urine, the serum of the blood transudes holding in solution albumen; hence, albuminuria. And perhaps in this situation, owing to the thin walls of the vessels composing the malpighian tufts, an exudation of fibrin or lymph may take place into the convoluted tubes, as a result of congestion merely, furnishing an exception to the rule that this exudation is a criterion of inflammation.

I come now to another question: Are the different morbid conditions of the kidneys different phases, modifications, or stages of one affection of these organs, or are they intrinsically different affections?

Bright appears not to have entertained a decided opinion on this point, although he inclined to regard the different forms as pathologically identical. Christison considered the different forms as successive steps of one affection. More recently this view has been advocated by Reinhardt and Frerichs. Prof. Clark regards the diversities in the morbid anatomy as proceeding from different modifications of one affection, together with incidental or accidental changes arising from the state of the blood or the condition of the system. Many, if not most, pathologists at the present time, hold to intrinsic and essential differences between certain of the different morbid conditions. I confess that this view appears to my mind most consistent with our present knowledge.

Take in the first place a division which all observers recognise, into the large kidney and the small or atrophied kidney. According to Christison and Frerichs, the small kidney represents simply a more advanced stage of disease than the large kidney; the kidney, when found to be atrophied after death, was, at a certain period prior to the fatal result, a large kidney; and the kidney found to be large after death would have eventuated in the small kidney, had the life of the patient been sufficiently prolonged. Of course, it is not contended that this change in these organs is demonstrable. We cannot trace deviations in the size of the kidneys, as we can of the liver during life. The point is to be settled by inferential reasoning. I will state, briefly, the grounds for the opinion which I have just expressed in opposition to the view of Christison, Frerichs, and others. The evidence to my mind that the large and the small kidney do not constitute different stages of one affection, is afforded by the fact that the previous clinical history, in cases of the small kidney, does not present the symptoms pertaining to the large kidney. As we shall presently see, and as is well known, the symptoms of the large and of the small kidney are, to a considerable extent, distinctive, so much so, that the differential diagnosis may generally be made. The immediate pathological effects in the kidney differ, in the small kidney the secretory function, and in the large kidney the circulation being especially interfered with. Now, we meet with cases of the following description: a patient is suddenly attacked with symptoms of uræmia. Prior to the attack there were no manifestations of any affection of the kidney. Perhaps the patient considered himself well. Death occurs suddenly, or in a short time, and after death the kidneys are found to be atrophied. In such cases it seems to me altogether improbable that the large kidney has existed without any of the symptoms which, as we shall presently see, belong to that condition. Again, we meet with cases in which albuminuria has existed for a long period—many months and even years; the patient at last dies, and the large kidney is found after death. Now, when the disease is thus prolonged, if the view entertained by Christison and Frerichs be correct, we ought to find the small kidney after death.

Take, in the second place, another division which is in like manner generally recognised, viz. into acute and chronic albuminuria. The acute and the chronic disease occur separately. Acute albuminuria, as a rule, does not end in the chronic; and the chronic, as a rule, is not preceded by the acute. But a much stronger point of difference is this: The morbid conditions in acute albuminuria may be, and often are, recovered from; the lesions are not necessarily destructive, while recovery from chronic albuminuria very rarely if ever takes place—the lesions are destructive and incurable. According to Johnson, in acute albuminuria the morbid conditions of the kidneys consist in the accumulation of desquamated epithelium and fibrin within the convoluted tubes. However this may be, clinical observation shows that the organs are not disorganized; and in this point of view, the difference between acute and

chronic albuminuria is not less than the difference between capillary bronchitis and pulmonary tuberculosis.

To recapitulate points of distinction already referred to: In the small kidney, we have disorganizing lesions; the secretion interfered with more than the circulation; the lesions consisting in the loss of epithelium, new products of disease being either wanting or not abundant. In the large kidney we have morbid products more or less abundant—fibrinous, albuminoid, fatty, together with, in certain cases, more or less destruction of the secreting tissue; the circulation frequently interfered with more than the secretory function; the products of disease remaining, and the organs disorganized. In the acute affection we have a condition or conditions of the kidneys not necessarily disorganizing or destructive, but admitting of complete recovery.

We are led now to a question which is, in fact, involved in that just considered. Is albuminuria to be considered as one disease, or does this term embrace several diseases? I have been led to think that the latter is the correct view: that is, the term embraces several different diseases. There seem to me to be sufficient grounds for recognising at least three distinct diseases, viz. 1. Acute albuminuria; 2. Chronic albuminuria with enlargement of the kidney, or without contraction; 3. Chronic albuminuria with contraction or atrophy. The individuality of each of these diseases is shown by facts pertaining to the kidney, already noticed, together with facts pertaining to the clinical history. Let me here enumerate the facts showing the individuality of each of these diseases.

First, of Acute Albuminuria. Examples of this disease are afforded by cases occurring in the progress or as a sequel of scarlatina; but cases occur independently of any connexion with scarlatina. In this disease, the pathological conditions of the kidneys may be recovered from, and are recovered from in the majority of cases. Dropsy is usually marked. The urine is generally scanty, sometimes containing blood in an appreciable quantity (hæmaturia), and often containing hæmatin, giving to the urine a smoky or sooty appearance. The sediment of the urine in most cases abounds in casts, which are of the epithelial variety, and, also, of the waxy, or hyaline; and the latter are of small size, the diameter varying from $\frac{1}{\overline{7}\overline{5}\overline{0}}$ to $\frac{1}{\overline{1}\overline{0}\overline{0}}$ of an inch. The albumen in the urine is abundant. Cases may end fatally by uræmic poisoning, but this is an accidental result. It is aggravating to lose a patient by this accident, for, if it had not occurred, the case would probably have ended in recovery. I have the records of several cases of acute albuminuria ending in recovery, exclusive of cases occurring in connexion with scarlatina. In some of these cases the disease occurred many years ago—in one as far back as ten years—the patients remaining in good health.

Second, of Chronic Albuminuria, with the large, or not contracted, kidney. This disease is chronic, or subacute, from the commencement. It is developed insidiously. Generally dropsy is the first event manifested, and this, in general, becomes marked. The albumen in the urine is more or less abundant; very rarely wanting. The urinary sediment sometimes contains casts, and sometimes not. The casts, when present, are granular, containing disintegrated epithelium, and waxy of large and small size, or containing oil drops. The disease is fatal sooner or later; the apparent recoveries being only apparent, not real. It may prove fatal by uræmic poisoning; but often the fatal ending is by asthenia, no symptoms of uræmic poisoning having been manifested during the whole course of the disease. Nausea and vomiting are apt to be prominent symptoms. There is progressive loss of strength; anæmia is a prominent feature; and if uræmic poisoning do not occur, the patient dies exhausted after a protracted duration of the disease.

It remains to be ascertained by clinical observation, whether this form of Bright's disease may not be further subdivided; in other words, whether the different varieties of the large kidney are not characterized by differences, as regards clinical history, sufficient to invest them respectively with a distinct individuality.

Third, of Chronic Albuminuria with contracted kidney. This, from the beginning, is a chronic or subacute disease. It is apt to be even more insidious in its development than chronic albuminuria with the large kidney. The dropsy is less, and is not infrequently very slight, or wanting. The albumen in the urine is slight, and may be absent. I believe absence of albumen not to be the rule in this disease, but that it is wanting in a certain proportion of cases. The disease generally proves fatal by uræmia; rarely, if ever, by asthenia. Phenomena of uræmic poisoning may be the first obvious symptoms of the disease. It sometimes proves rapidly fatal by uræmia, and cases occur in which sudden death takes place with uræmic coma, and the existence of disease of the kidneys had not been suspected. In some cases a fatal result occurs from local inflammations incidental to uræmia, inflammations especially of the serous membranes—peritonitis, pleuritis, pericarditis. The sediment of the urine contains casts which are granular and waxy. The latter are of large size; they have been found to measure only $\frac{1}{\overline{2}\overline{5}\overline{0}}$ of an inch in diameter.

As regards casts of the uriniferous or convoluted tubes found in the sediment of the urine, the researches of Dr. George Johnson, if they are confirmed by clinical observation, seem to me to be of great importance in their application to diagnosis. In the first place, they are of great diagnostic value in the cases in which (the solecism is admissible in accordance with our definition) albuminuria exists without the presence of albumen in the urine; or, in other words, in the case of contracted kidney in which albuminuria is wanting. But in addition to this application, the different physical characters pertaining to the casts are supposed to denote different morbid conditions of the kidneys. The *epithelial* casts denote simply desquamation of the epithelium of the convoluted tubes, and belong especially to acute albuminuria. The *granular* casts denote degeneration of epithelium, and belong to cases of chronic albuminuria, in which the epithelial structure is undergoing disintegration. The *oily* casts denote the transudation of oil into the tubes. The *waxy* or *hyaline* casts have an important significance according to their size. If they are small in size, they denote that they are formed in tubes in which the epithelial membrane is intact; but if large, they are formed in tubes in which the epithelium is lost. When only $\frac{1}{\overline{3}\overline{5}\overline{0}}$ of an inch in diameter, they are nearly as large as the tubes themselves, and hence the latter must be denuded of their epithelial lining. If clinical experience establishes these views regarding the significance of the different varieties of casts, we may truly say that the microscope is to the diagnosis of pathological conditions of the kidneys, what the stethoscope is to the affections of the chest.

It occurs to me to remark that the importance of determining the amount of urea excreted in the urine, in cases of disease of the kidneys, is not sufficiently appreciated by the profession. The amount of urea excreted will show whether the excretory function of the kidneys be impaired, and to what extent.

(To be Continued.)

DISLOCATION OF STERNAL END OF CLAVICLE UPWARDS.

By JNO. G. BIGHAM, M D.

Thomas Scott, a farm laborer, æt. 24, on 20th December, 1860, while attempting to bridle a wild colt, in a barn, was crushed between the animal's body and the side of the building.

He could give no very definite account as to the precise direction from which the pressure was sustained. I saw him an hour after the occurrence of the accident.

He was sitting with the back of his head turned downwards and forwards towards the left shoulder. On asking

him to stand up, he still held his head in the same position, and the left shoulder drooped very considerably.

I found the sternal extremity of the left clavicle elevated directly from its fossa, as much as an inch and a half.

The clavicular portion of the sterno-cleido-mastoid muscle formed quite a bunch just over the end of the bone, and the sternal portion was rendered very tense and prominent—the extremity of the clavicle apparently resting against it.

The patient complained of extreme pain on the application of pressure upon the sternal end of the bone.

By carrying the shoulder strongly upwards and outwards, I could restore the bone to its natural position without making the direct pressure of which he complained.

The dressings used in this case were simply a pretty large axillary pad, a bandage holding the elbow down to the side, and a sling to keep the shoulder up.

The sling was arranged, by means of a sleeve, so as to give support to the lower end of the humerus and the entire forearm. The bandage was firmly applied, and the sling was made so short that the shoulder was kept above its natural level. The patient could now move his head at pleasure, without much pain. The dressing was not changed for four weeks at all, except to prevent loosening.

At the end of four weeks the bandage and pad were removed, but the forearm was kept in a sling for a fortnight longer, when union of the ligaments seemed to have been established.

The extremity of the left clavicle was slightly higher than the right; but there was no drooping of the shoulder.

On the 26th October, 1862, I examined the patient again. There was no drooping of the shoulder observable, either while standing or walking.

The degree of elevation of the extremity of the clavicle was about the same as when the dressings were left off—not to exceed a quarter of an inch.

Since the spring of 1861, this man has been constantly employed as a farm laborer, at customary wages, and finds no impediment from the injury, except in lifting anything higher than his head.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

ADJOURNED MEETING, July 9, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. BYRNE'S PAPER ON PELVIC HÆMATOCELE.

(*Continued from page* 290.)

DR. BYRNE said: MR. PRESIDENT—Over five months have now elapsed since I had the honor to present to this Academy my paper on pelvic hæmatocele, and though two distinguished members favored us with their views on the subject at that time, it has since been allowed to slumber quietly, so far as this Society is concerned, until the last meeting, at which I regret to say I was not present. The long time which has thus passed without further comment, and the character of some of the remarks offered on a former occasion, make it more than probable that the subject is one which gentlemen were not yet prepared to discuss intelligibly. For the very flattering, though I fear unmerited terms in which Professor Barker has referred to my paper, I cannot but feel complimented, as I am fully conscious of the value of opinions from such a source. I trust, nevertheless, that entertaining as I do the highest estimate of that gentleman's ability, I also may be permitted to "*criticise where I differ from him*," and that what I shall here say may be accepted in that friendly spirit which should always characterize scientific debate. I propose, therefore, with your permission, to notice in detail a few of the more prominent points in that gentleman's remarks. In looking over the report, I could not help noticing one very remarkable inconsistency in Dr. Barker's review of my paper, and that is, that he should see fit to bestow the highest encomiums on a production in which he can find nothing whatever to commend; for, neither in the history, causes, pathology, diagnosis, nor treatment, does he agree with the author, and on some questions he differs entirely with every observer who has thoroughly investigated the subject, so far as I know.

The author is first of all reminded that the credit which he has awarded to Prof. Nelaton belongs, more properly, to Dr. Bernutz; and Dr. Barker, having thus noticed what he seems to consider a bibliographical error, proceeds to espouse the cause of the latter author in a style more forcible than complimentary to the former. This done, he next goes on to supply the historical omissions by informing you that other cases which I did not notice had been reported by Ruysch in the eighteenth century, and by Dr. Bright, Sir B. Brodie, and M. Velpeau, at a later period. It cannot be denied but that my sketch of the earlier history of bloody tumors of the pelvis was a very hurried and incomplete one; but those who may have read my paper could hardly fail to observe that a mere allusion to that part of the subject was all the writer intended to offer; because a moment's reflection will suffice to show that more space than has been devoted to the whole subject could be well and profitably occupied with a full review of the history of this disease. Therefore, a desire to curtail my remarks, as far as consistent with a general reference to the bibliography of the disease, prompted me to omit even a passing notice of many observers whose claims could hardly be disregarded with any degree of justice in a more extended and perfect treatise. Moreover, my paper was written with some knowledge of most of the earlier contributions to the pathology of intra-pelvian hæmorrhages, including, of course, those most valuable and instructive papers of Dr. Bernutz, and of which no observer at all acquainted with the literature of these maladies could possibly be ignorant. I cannot, however, see wherein my error consists, in claiming for the great French clinician the merit of having been *the first* to institute a thorough and comprehensive investigation into the causes, nature, and treatment of bloody tumors of the pelvis, to which *he was the first* to give the name of "*retro-uterine hæmatocele.*" To accomplish this end, he was obliged to summon to his aid not only the results of his own varied and almost unlimited experience, but also the many contributions of contemporary writers until then existing in a very fragmentary state. The impetus thus given to a more exact study of this class of diseases has been well exemplified by the numerous able and interesting papers which quickly followed; and no one can say that the praises bestowed by Prof. Nelaton on the labors of his pupils in this direction were unmerited.

Whether Nelaton, in his zeal, has laid himself open to the grave charge of plagiarism, is a question which I shall not stop to discuss now; but I cannot for a moment believe that he who could so well afford to be just, as well as truthful in such matters, could have been guilty of arrogating to himself, knowingly, a distinction to which he had no claim. The great bulk of the profession, particularly in France, could not have been ignorant of the existence of Bernutz's valuable memoirs, published in 1848, or of the fact that this author's researches date back as far as 1844; and, therefore, had the motives of Nelaton been such as Dr. Barker, and others previously, have attributed to him, his efforts would have been no less fruitless than dishonorable.

Regarding the supposed connexion between disordered menstruation and hæmatocele, I have only to repeat in substance what has been considered more fully in my paper, namely, that disordered menstruation ought to be viewed, for the most part, as one of the various symptoms following in the train of morbid phenomena, and, *as a rule*, having no causal connexion whatever with that pathological condition known as hæmatocele, because it would

seem, at least, very improbable, "*that hæmorrhage to such an extent as to produce even a moderately-sized retro-uterine tumor, can take place from a healthy ovary, or the vessels of a tube whose lining membrane is free from structural lesions.*" At the same time it is hardly necessary for me to say that I am not unmindful of the possibility, nay, the fact, that bloody extravasations within the pelvis may, and not unfrequently do, take place from mechanical obstructions, a disordered state of the circulating fluid, traumatic influences, and congestions arising from mental emotions, thereby producing imperfect ovulation; and I think I have made myself sufficiently intelligible on these points. I have, therefore, ventured to place *first on the list of predisposing causes*, "inflammation of the uterine appendages and its consequences," which I believe to be, not by any means always, but "*oftentimes the primary, and by far the most frequent among the predisposing causes of pelvic hæmatocele.*" Moreover, I am forced to conclude that ovaritis occurring independently of puerperal influences, or any appreciable primary lesion, is by no means so rare a disease as Dr. Bennet and those who accept his sweeping assertions would have us suppose. It has been stated that I have quoted, among other authors, Dr. West, in support of my opinions, on these points, which, I beg to say, is an error, though I should always place much value on statements coming from so high a source, the opinions of a very few others to the contrary notwithstanding. Because an author of whom even Dr. Bennet says, "*he looks, he examines for himself,*" and who has based his lectures on long experience derived *not* "*from books in his library,*" but from the bedside of patients in the Middlesex and St. Bartholomew's hospitals, as well as a most extensive private practice, needs no eulogium from me, and can easily afford to pass unnoticed such insinuations as I have referred to. But, in order to strengthen the position which I have taken relative to this *quæstio vexata*, I referred to the writings of Professor Simpson, Drs. Rigby, Ashwell, Robert Lee, Tilt, and others; and yet in the face of such authorities, and because cases of ovarian pain *apparently* resulting from ulceration of the os and cervix uteri, have been cured by topical applications to this source of the trouble, and since the contact of powerful caustic substances with the cervix —*too often, I fear, practised of late years*—has sometimes given rise to ovarian inflammation, we are again assured by Dr. Barker, that "non-puerperal ovaritis is one of the most rare affections ever met with," and that "he has been for years looking for its existence in the dead-house, and doubts if he has ever seen a clear case of it."

Now with all due respect for the gentleman's acknowledged ability and acuteness of observation, I would most respectfully submit that the well known, and, I would add, generally accepted opinions of the authors whose writings I have referred to in support of my views, with the few sentences which I quoted, and which, with your permission, I will read, ought to have some weight in deciding these important questions.

On this subject Dr. Ashwell says, "Of all the organs of the human body, scarcely any seem so prone either to functional or organic disease as the ovaries; for I can with truth say that I have rarely, when examining these important organs after death, found them entirely healthy;" and Dr. Robert Lee declares that, "in many cases of disordered menstruation, chlorosis, and hysteria, which we have observed, the symptoms have been *clearly* referable to certain morbid states of the uterine appendages, and decided benefit has resulted from the application of those local remedies which were employed with a view of subduing the irritation, the congestion, or the inflammation which appeared to be present in those parts of the uterine system."

Dr. Barker has stated that the difference between Dr. Bennet and the writers referred to is, "that Dr. Bennet writes from his knowledge received at the bedside, and not from the study of authors and preconceived opinions." Now, sir, without wishing to dive too deeply into the mysteries of book-making, of which I pretend to little or no knowledge, either practically or otherwise, I would ask whether the extracts which I have just read, not to speak of their source, bear any resemblance to the dovetailed, but drowsy and threadbare productions of the theoretical compiler? I think not, and so, I imagine, do most of their readers. If, therefore, I have failed to reconcile the peculiar views of Dr. Bennet touching the frequency of non-puerperal and idiopathic ovaritis with pathological facts and my own experience, I object nevertheless to being understood as endorsing the equally erroneous ideas of those who would attribute every ail to which the female organs are subject, to ovarian inflammation. Moreover, when any of the high—not *library* but practical—authorities whom I have quoted, presume to assert that non-specific inflammatory ulceration of the os and cervix uteri does not exist, I feel not only sceptical as to the statement, but amazed at such a remarkable perversion of facts.

But even Dr. Bennet must not be supposed to entertain such extreme views as my friend Dr. Barker, because he admits that ovaritis *does* occur independently of the puerperal state, and even of uterine inflammation, and goes no further than to say that it is, *in the great majority of cases*, secondary in its development.

Moreover, in his "*Review of Uterine Pathology,*" he endeavors to define his position thus: "*Ovaritis exists both in acute and chronic forms, and when it is present reacts, of course, on the uterine functions, giving rise to a regular sequence of symptoms; but to attribute to sub-acute ovaritis, the cases in which tenderness, pain, and fulness of the ovarian regions are found, and to look upon the co-existing uterine lesions and symptoms as merely sympathetic conditions, is simply a pathological error, the result of pathological prepossessions. It is giving to the ovaries, pathologically, the same pre-eminence in the female genital system that they really do exercise physiologically—a pre-eminence to which they have no claim.*"

Now it strikes me that this very physiological pre-eminence so flippantly disposed of, is one of the very strongest arguments in favor of a still greater modification of his original theory; because if these small, but physiologically important bodies, to which every uterine function is subservient, have little or no pathological importance, it is rather singular, that among those who not only fail to appreciate the philosophy of this style of reasoning, but denounce the doctrine as a dangerous heresy, may be numbered some of the brightest lights in our profession.

In Clay's translation of "*Kiewisch on the Diseases of the Ovaries,*" page 61, that author, speaking of inflammatory exudations, the result of ovaritis, apart from the puerperal condition, says: "In post-mortem examinations they are *repeatedly* met with in the form of cellular membranes and bands, which are occasionally so extensive, that the ovaries, the tubes, and the broad ligaments are converted *into an inextricable mass from which the ovaries can scarcely be separated.*" And further on at page 65, alluding to "primitive inflammation of the stroma" of these organs, he says: "*Though occurring less frequently in the non-puerperal state, etc., still serious inflammations of the ovaries do exist which affect the whole of the organs, and occasion a very severe, acute metamorphosis, sometimes terminating in a short period, as happened in the case of two young persons whom we saw, in the one by an acute abscess, in the other by a sanious disintegration (a kind of putrescence).*"

Dr. Barker says: "He has examined a great many ovaries, and the amount of extravasation in no case exceeded a few drops." And again: "The ovaries are not excessively vascular organs, and do not possess vessels enough to give off from 8 oz. to 2 or 3 pints of blood." I am not surprised, sir, that Dr. Finnell, of whose opportunities and valuable contributions to pathology I need not remind this Academy, should have expressed his astonishment at such a statement; nor can I agree with Dr. Barker, whose experience in this respect, as well as the conclusions drawn therefrom, are entirely opposed to numerous well authenticated pathological facts, copious extravasations of blood

owing to excessive vascularity of that organ, and rupture of some of its dilated vessels, having been repeatedly demonstrated by many observers.

Because, therefore, the vessels of the ovary, *in its normal condition*, are neither large nor numerous, it surely does not follow that the tissues comprising this gland, when subjected to morbid influences, such as might follow, for instance, inflammatory congestion, should remain unaltered and intact.

In some of my more recent investigations, lately published, I have ventured to suggest that varicosity of the utero-ovarian veins in married women, *and more particularly those who have been pregnant*, will be found to be a frequent cause of ovaritis as well as hæmatocele, and that permanent dilatation of these veins, more or less, is a necessary consequence of pregnancy. If this theory be correct (and I hope by future investigations to be able to show that it is so), we have, at once, a pretty satisfactory explanation of the fact that in a large majority (perhaps four-fifths) of all the cases of hæmatocele recorded, the subjects have been married women.

With regard to Case I., referred to by Dr. Barker, I freely admit that, *in the first instance*, it was a clear example of *pelvic cellulitis;* but the patient had entirely recovered from this, with the exception of a not unfrequent sequel to such attacks, namely, chronic inflammation of the ovary and adjoining tissues, which, after the lapse of nine months, ended by rupture of dilated and inflamed veins within the folds of the broad ligament, and the *immediate* formation of a tumor. This, at least, is the only rational explanation of such a case; and I think both the symptoms and termination perfectly justify the conclusion, that it was an example of sub-peritoneal hæmatocele.

In this connexion I would remark, that the subsequent illness of this same patient, related in my paper as Case IV., is typical of very many others which I have met with, where the history, symptoms, and permanent benefit derived "*from the application of those local remedies which were employed with a view of subduing the irritation, the congestion, or the inflammation which appeared to be present*" (as Dr. Robert Lee correctly observes), prove satisfactorily to my mind, that not only in this, but many similar cases, parenchymatous ovaritis, or, perhaps, more correctly speaking, "*ovarian phlebitis*," is a primary and distinct disease, and wholly independent of any uterine lesion. Were it otherwise, I am at a loss to know how, or upon what pathological or therapeutical principles, to account for the satisfactory results of my treatment in such cases.

For these reasons, therefore, and to avoid misconception, I will state in a few words my position as regards the point at issue, which is, that though irritation and inflammation of the ovaries, Fallopian tubes, and surrounding tissues may take place, as sympathetic of uterine lesions, yet, that a similar condition of all or either of these parts is often a primary disease, and entirely independent of any pre-existing structural lesion whatever, so far as the uterus is concerned at least. Having thus explained my views on these questions, I would beg to remind Dr. Barker that I have not, in my paper, attempted to discuss the relative frequency of the various kinds and degrees of ovarian inflammation, nor can I see any benefit likely to arise from pursuing this part of the subject, which I consider entirely irrelevant: because, whether non-puerperal, chronic, or sub-acute ovaritis be a rare or a frequent disease, has nothing whatever to do with my position as regards the causes of hæmatocele. This latter I believe to be a rare disease, but it does not necessarily follow that the most frequent of all predisposing causes should be equally so, for I imagine, as I said before, that varicosity of the utero-ovarian veins will be found to be a very frequent result of pregnancy and parturition.

In relation to the symptoms which precede pelvic cellulitis, and those of hæmatocele, I would remark, that though, as a rule, in the one case the constitutional disturbance will be great, and in the other hardly appreciable, but the malady generally manifested by abdominal pain, more or less anæmia, great prostration, and the immediate formation of a tumor, *if sub-peritoneal;* still, as I have stated, "an accurate idea of the nature of these tumors will often be next to impossible, until the trocar shall have penetrated their walls."

(*To be Continued.*)

American Medical Times.

SATURDAY, NOVEMBER 29, 1862.

HOSPITAL FUND—ITS USES AND ABUSES.

We alluded, last week, to some of the more important instances of mismanagement in our military hospitals. They were of that class of abuses which are for the most part apparent on a casual inspection. There are others which can be determined only by inquiry, as, for example, the character of the nurses, the qualifications of the medical officers, the efficiency and honesty of the steward, the matron, and of all the subordinate employées. In this catalogue is the hospital fund, which is very generally believed to be a source of great corruption and abuse. It will not be amiss at this time to consider briefly the nature of this fund, its uses and abuses.

The hospital fund is the difference of the estimated value of the rations allowed to the hospital, and of those actually drawn. That is, Government allows to each patient a given number of rations, whether they are consumed or not. If a patient is very sick, and no ration is drawn, the value of the ration, estimated by the price of the articles in the market where the hospital is located, is credited to the hospital, and hence accrues the fund known as the hospital fund. It is evident that this fund will vary principally according to the severity of the cases in the hospital; that is, the larger the number of patients not requiring rations on account of sickness, the larger the amount credited to the hospital. Assistant-Surgeon Woodward, U.S.A., a recent and experienced writer on hospital management, remarks: "The hospital fund, in a properly managed hospital, should amount to from one-fourth to one-half of the total cost of the rations to which the number of patients and attendants in the hospital are entitled. Thus, in a hospital for five hundred patients, at a post where the ration is estimated at eighteen cents cost price for each full ration, the monthly savings should be, at least, six hundred and fifty dollars, and, under favorable circumstances, may swell to fourteen hundred dollars, or even more." That this is not an exaggerated statement he cites the Seminary Hospital, Georgetown, D.C., while under the efficient management of Surgeon Jos. R. Smith, U.S.A., which, with one hundred and thirty to one hundred and fifty patients, and the average cost price of the ration eighteen cents, had a monthly saving of from three hundred and fifty to four hundred and fifty dollars. Many other instances might be given where a proportionate sum has monthly accumulated.

The manner in which this fund is to be expended is prescribed in the revised army regulations as follows: "The hospital fund, or any part of it, may be expended by the

commissary on the requisition of the medical officer, in the purchase of any article for the subsistence or comfort of the sick, not authorized to be otherwise furnished." The supply of extras to the hospital diet may thus embrace every article of the market, not included in the rations, which the surgeon may deem necessary. Eggs, chickens, milk, fruits, etc., etc., may be furnished, so as to give the most ample variety to the mess-table, and in sufficient abundance. On a recent visit to David's Island Hospitals, we found the following extra articles purchased from the hospital fund for that day, viz. fresh meat, one thousand three hundred pounds; eggs, five hundred and fif y; milk, eight hundred quarts; bread, two thousand six hundred pounds; and milk punch, two hundred and forty bottles. The number of patients was about one thousand five hundred. But the surgeon is not limited to articles of diet; he may purchase anything that adds to the comfort of the patient. He may purchase articles of clothing, combs, brooms, dishes, etc., etc., according to the wants of the hospital and of the individual patients. It will thus be seen that a well managed hospital fund is a most important feature of our military hospitals. It supplements the allowances of Government, and enables the discreet surgeon to furnish the wards with every needed article, and to supply the table and the very sick with desirable delicacies.

But this fund may be expended improperly. The surgeon may, under certain circumstances, draw the money and disburse it himself. The impression is wide-spread that in this manner large sums are appropriated by individuals. But, we believe, this is a great error. Where the surgeon receives money on account of the hospital fund, he is required to present vouchers, showing in detail its expenditure, like any disbursing officer. It is quite impossible for him to put such moneys to his own account without a system of collusion, fraud, and forgery, which few criminals even would care to encounter. We may safely conclude, therefore, that the hospital fund rarely, if ever, is appropriated directly by the medical officer.

Again, this fund may be mismanaged in the manner of its expenditure. Here is a real source of evil. If economy is not constantly exercised in the purchase of articles, the fund may be readily and rapidly misappropriated, with but little benefit to the hospital. Dishonesty, also, may be practised by collusion with the produce dealer; but we cannot believe that there is a surgeon in charge of a hospital who would stoop to so unworthy an act. The method of securing true economy in the expenditure is thus pointed out by Dr. Woodward: "Economy is secured by keeping the provisions and stores of the hospital under lock and key, so as to prevent all unauthorized expenditures, and comparing from time to time the daily expenditures with each other, and the number of patients, so as to become at once aware of any inadvertent extravagance; by prudence in drawing or purchasing perishable articles, such as fresh meat, etc., which should be so managed that, while there is enough for all purposes, none should be left over to spoil; by skill and economy in the management of the kitchen; by economy with the gas, lamps, or other means resorted to to light the hospital; and, finally, by taking care to make the purchases for the hospital of honest dealers, and to pay for them no more than the market price." He estimates that twenty-five to fifty per cent of the hospital fund, or even more, may be lost by making the purchases of an improper person.

We are satisfied from personal observation that in no one respect is there a greater difference in the management of hospitals, than in the proper disposition of the hospital fund. Of two hospitals of equal size, and with the same average of severe cases, we may find in one the mess-table supplied only with the regular army ration; no butter, potatoes or other vegetables are ever seen by the half-starved patients, unless they purchase them with their own funds. The wards are barren of every little article of convenience, which tend so much to make them cheerful. In the other the diet is liberal, including vegetables, puddings, etc.; the walls are neatly furnished, the windows curtained, and comforts abound on every hand. We would urge every surgeon in charge of a hospital to study constantly the proper appropriation of his hospital fund.

THE WEEK.

The effect of the rise of prices is very sensibly felt by druggists. In many instances the prices of the most common drugs have increased fifty per cent. The druggist, however, can scarcely add to his charges in the retail of drugs without receiving censure. The retail drug business must therefore suffer severely. But the retail druggist who does a large business in prescriptions has a remedy in the enormous profit on prescriptions. Physicians should be informed of this increase in the price of drugs; and as far as possible, when prescribing for the poor, select those articles least expensive, and yet capable of accomplishing the desired result.

—

Another case of induced abortion has come to light in this city by the death of the victim. Such an occurrence is suggestive of the thought that this is but an accidental exposure of a large and lucrative business. The public learn the fact because the operation proved fatal. How many similar operations are performed of which we know nothing, can only be surmised. There is no doubt, however, that the abortionists form a distinct craft among us, and are never in want of engagements. But they are rarely detected in their black art, and when arrested, easily escape from the grasp of justice.

—

The circular of the President to the Army and Navy, requiring that no unnecessary labor be performed on the Sabbath, is designed to affect powerfully the physical as well as the moral well-being of those engaged in the public service. The rest of the Sabbath, or of one day in the seven, is one of the most imperative requirements of our nature. To the soldier and marine, who are often required to do a large amount of unnecessary duty on the Sabbath, this order will be most welcome. The majority of them can read and write, and can improve their leisure hours profitably. This circular reflects the highest possible credit upon our Chief Magistrate, who has so promptly responded to the wishes of the citizens who brought the subject to his attention.

—

The regulations for the organization of Division Hospitals established by Dr. Letterman, Medical Director of the Army of the Potomac, are admirably designed to give efficiency to the medical corps during battle, and to prevent

delay in dressing and operations, and consequent suffering of the wounded. Such, or a similar system, should be adopted in every branch of the army, wherever located. We earnestly commend it in detail to the attention of Medical Directors of the different Army corps.

Army Medical Intelligence.

AMBULANCE SYSTEM OF THE ARMY OF THE POTOMAC.

[Army Correspondence of the American Medical Times.]

In your edition of the Medical Times for Nov. 1st, there are some editorial remarks on the Ambulance System of the Army of the Potomac. Whilst you urge the adoption of an ambulance system for the whole army, you advise that the order of General McClellan of Aug. 2d, should be adopted, in its main features. I take the liberty of inclosing a copy* of that order, and stating that at present it is in full operation in the six corps of this army, which have advanced from Berlin.

It is not generally known that this system has been but partially adopted in this army, previous to the battles of South Mountain and Antietam. At South Mountain the heaviest loss occurred after five P.M., and the fighting was continued fiercely until nine, yet a thousand wounded were carried to Middletown, a distance of three or four miles, before morning. At the battle of Antietam, the ambulances in Burnside's corps were still under the control of the Regimental Medical Officers, and the wounded in this corps, on the left, were not removed with the celerity and care that obtained on the right, where the corps of Hooker, Sumner, and Franklin were engaged, and neither horses nor men in the ambulance corps took rest or refreshment until all the wounded had been removed to the temporary hospitals.

The great virtue of Dr. Letterman's system consists in the fact that the horses, harness, wagons, etc., are under the charge of a line officer, who has no other duty to perform, and who is responsible that the ambulances are, at all times, ready to perform their duty, under the direction of the medical profession. The Medical Department still controls them completely, whilst it is relieved of the irksome care of their equipment. Several changes have been found requisite since the publication of the order, to insure its greater efficiency.

Whilst an effort should undoubtedly be made, through Congress, to improve this branch of the service, it will relieve some anxiety, and allay, to a great extent, the alarm created by such descriptions as those of Dr. Bowditch, to know, that in this army, no such horrible scenes can possibly be enacted.

Near Warrenton, Va., Nov. 19.

* HEADQUARTERS, ARMY OF THE POTOMAC.
Camp near Harrison's Landing, Va., August 2, 1862.

General Orders, No. 147.

The following regulations for the organization of the Ambulance Corps and the management of Ambulance Trains, are published for the information and government of all concerned. Commanders of Army Corps will see that they are carried into effect without delay.

1. The Ambulance Corps will be organized on the basis of a Captain to each Army Corps as the Commandant of the Ambulance Corps; a 1st Lieutenant for a Division; 2d Lieutenant for a Brigade; and a Sergeant for each Regiment.

2. The allowance of ambulances and transport carts will be—one transport cart, one 4-horse and two 2-horse ambulances for a Regiment; one 2-horse ambulance for each Battery of Artillery; and two 2-horse ambulances for the Headquarters of each Army Corps. Each ambulance will be provided with two stretchers.

3. The privates of the ambulance corps will consist of two men and a driver to each ambulance, and one driver to each transport cart.

4. The Captain is the Commander of all the ambulances and transport carts in the Army Corps, under the direction of the Medical Director. He will pay special attention to the condition of the ambulances, horses, harness, &c., requiring daily inspections to be made by the commanders of Division ambulances, and reports thereof to be made to him by these officers. He will make a personal inspection once a week of all the ambulances, transport carts, horses, harness, &c., whether they have been used for any other purpose than the transportation of the sick and wounded, and medical supplies; reports of which will be transmitted, through the Medical Director of the Army Corps, to the Medical Director of the Army, every Sunday morning. He will institute a drill in his Corps, instructing his men in the most easy and expeditious method of putting men in and taking them out of the ambulances, taking men from the ground and placing and carrying them on stretchers, observing that the front man steps off with the left foot, and the rear man with the right, &c. He will be especially careful that the ambulances and transport carts are at all times in order, provided with attendants, drivers, horses, &c., and the kegs daily rinsed and filled with fresh water, that he may be able to move at any moment. Previous to and in time of action, he will receive from the Medical Director of the Army Corps his orders for the distribution of the ambulances, and the points to which he will carry the wounded, using the light two-horse ambulances for bringing men from the field, and the four-horse ones for carrying those already attended to further to the rear, if the Medical Director considers it necessary. He will give his personal attention to the removal of the sick and wounded from the field and to and from the hospitals, going from point to point to ascertain what may be wanted, and to see that his subordinates (for whose conduct he will be responsible.) attend to their duties in taking care of the wounded, treating them with gentleness and care, and removing them as quickly as possible to the places pointed out; and that the ambulances reach their destination. He will make a full and detailed report after every action and march of the operations of the Ambulance Corps.

5. The 1st Lieutenant assigned to the Ambulance Corps of a Division will have complete control, under the commander of the whole Corps and the Medical Director, of all the ambulances, transport carts, ambulance horses, &c., in the Division. He will be the Acting Assistant Quartermaster for the Division Ambulance Corps, and will receipt and be responsible for the property belonging to it, and be held responsible for any deficiency in ambulances, transport carts, horses, harness, &c., pertaining to the Ambulance Corps of the Division. He will have a travelling cavalry forge, a blacksmith, and a saddler, who will be under his orders, to enable him to keep his train in order. He will receive a daily inspection report of all the ambulances, horses, &c., under his charge from the officer in charge of Brigade Ambulance Corps, will see that the subordinates attend strictly to their duties at all times, and will inspect the Corps under his charge once a week; a report of which inspection he will transmit to the commander of the Ambulance Corps.

6. The 2d Lieutenant in command of the ambulances of a Brigade will be under the immediate orders of the commander of the Ambulance Corps for the Division, and have superintendence of the Ambulance Corps for the Brigade.

7. The Sergeant in charge of the Ambulance Corps for a Regiment will conduct the drills, inspections, &c., under the orders of the commander of the Brigade Ambulance Corps, and will be particular in enforcing rigidly all orders he may receive from his superior officers. The officers and non-commissioned officers of this Corps will be mounted.

8. The detail for this Corps will be made with care by commanders of Army Corps; and no officer or man will be selected for this duty, except those known to be active and efficient; and no man will be relieved, except by orders of these Headquarters. Should any officer or man detailed for this duty be found not fitted for it, representations of the fact will be made by the Medical Director of the Army Corps to the Medical Director of this Army.

9. Two medical officers from the Reserve Corps of Surgeons of each Division, and a Hospital Steward who will be with the medicine wagon, will be detailed by the Medical Director of the Army Corps, to accompany the ambulance train when on the march, the train of each Division being kept together, and will see that the sick and wounded are properly attended to. A medicine wagon will accompany each train.

10. The officers connected with the Corps must be with the trains on a march, observing that no one rides in the ambulances without the authority of the medical officers, except in urgent cases; but men must not be allowed to straggle. The officers will, when the medical officers cannot be found, use a sound discretion in this matter, and be especially careful that the men and drivers are in their proper places. The place for the ambulances is in the front of all wagon trains.

11. When in camp the ambulances, transport carts, and Ambulance Corps will be parked with the Brigade, under the supervision of the commander of the Corps for the Brigade. They will be used on the requisition of the regimental medical officers, transmitted to the commander of the Brigade Ambulance Corps, for transmitting the sick to various points, and procuring medical supplies, and *for nothing else*. The non-commissioned officer in charge will always accompany the ambulances or transport carts when on this or any other duty, and he will be held responsible that they are used for none other than their legitimate purposes. Should any officer infringe upon this order regarding the uses of ambulances, &c., he will be reported by the officer or non-commissioned officer in charge to the commander of the train, all the particulars being given.

12. The officer in charge of a train will at once remove anything not legitimate, and if there be not room for it in the baggage wagons of the Regiment, will leave it on the road. Any attempt by a superior officer to prevent him from doing his duty in this or any other instance he will promptly report to the Medical Director of the Army Corps, who will lay the matter before the Commander of that Corps. The latter will at the earliest possible moment place the officer so offending in arrest, for trial for disobedience of orders.

13. Good, serviceable horses will be used for the ambulances and transport carts, and will not be taken for any other purpose, except by orders from these Headquarters.

14. The uniform of this Corps is—for privates, a green hand two inches broad around the cap, a green half chevron two inches broad on each arm above the elbow, and to be armed with revolvers. Non-commissioned officers to wear the same band around the cap as a private, chevrons two inches broad, and green, with the points towards the shoulder, on each arm, above the elbow.

15. No person will be allowed to carry from the field any wounded or sick, except this Corps.

16. The commanders of the Ambulance Corps, on being detailed, will report without delay to the Medical Director at these Headquarters for instructions. All Division, Brigade or Regimental Quartermasters having any ambulances, transport carts, ambulance horses or harness, etc., in their possession, will turn them in at once to the commander of the Division Ambulance Corps.

By Command of Major General McClellan:
S. Williams, *Assistant Adjutant General.*

ORGANIZATION OF DIVISION HOSPITALS.

CIRCULAR.

HEADQUARTERS ARMY OF THE POTOMAC,
MED. DIRECTOR'S OFFICE, Oct. 30, 1862.

In order that the wounded may receive the most prompt and efficient attention during and after an engagement, and that the necessary operations may be performed by the most skilful and responsible surgeons at the earliest moment, the following instructions are issued for the guidance of the Medical Staff of this Army; and Medical Directors of Corps will see that they are promptly carried into effect:

Previous to an engagement there will be established in each Corps a Hospital for each Division, the position of which will be selected by the Medical Director of the Corps.

The organization of this Hospital will be as follows:

1st. A Surgeon in charge;
One Assistant-Surgeon to provide food, shelter, &c.;
One Assistant-Surgeon to keep the records, &c.

2d. Three Medical Officers to perform operations;
Three Medical Officers as Assistants to each of these officers.

2d. Additional Medical Officers and Hospital Stewards and Nurses of the Division.

The Surgeon in charge will have general superintendence, and be responsible to the Surgeon-in-Chief of the Division for the proper administration of the Hospital.

The Surgeon-in-Chief of Division will detail one Assistant-Surgeon, who will report to, and under the immediate orders of, the Surgeon in charge, and whose duties shall be to pitch the Hospital Tents and provide straw, fuel, water, blankets, &c.; and, when houses are used, to put them in proper order for the reception of wounded. This Assistant-Surgeon will, when this shall have been accomplished, at once organize a kitchen, using for this purpose the Hospital mess chest, and the kettles, tins, &c., in the ambulances. The supplies of beef stock and bread in the ambulances, and of arrow root, tea, &c., in the hospital wagon, enable him to prepare quickly a sufficient quantity of palatable and nourishing food. All the Cooks, and such of the Hospital Stewards and Nurses as may be necessary, will be placed under his orders for these purposes.

He will detail another Assistant-Surgeon, whose duty it shall be to keep a complete record of every case brought to the Hospital, giving the name, rank, company, and regiment, the seat and character of injury, the treatment, the operation if any be performed, and the result; which will be transmitted to the Medical Director of the Corps, and by him sent to this office.

This officer will also see to the proper interment of those who die, and that the grave be marked with a *head-board*, with the name, rank, company, and regiment, legibly inscribed thereon. He will make out two "tabular statements of wounded," which the Surgeon-in-Chief of Division will transmit within thirty-six hours after a battle; one to this office, (by a special messenger, if necessary,) and the other to the Medical Director of the Corps to which the hospital belongs.

There will be selected from the Division by the Surgeon-in-Chief, under the direction of the Medical Director of the Corps, three medical officers, who will be the operating staff of the hospital, with whom will rest the immediate responsibility of the performance of all important operations. In all doubtful cases they will consult together, and a majority shall decide upon the expediency and character of the operation. These officers will be selected from the Division without regard to rank, but *solely* on account of their known prudence, judgment, and skill. The Surgeon-in-Chief of the Division is enjoined to be specially careful in the selection of these officers, choosing only those who have distinguished themselves for surgical skill, sound judgment, and conscientious regard for the highest interest of the wounded.

There will be detailed three medical officers to act as assistants to each one of these officers, who will report to him and act entirely under his direction.

It is suggested that one of these assistants be selected to administer the anæsthetic. Each operating surgeon will be provided with an excellent table from the Hospital wagon, and, with the present organization for field hospitals, it is hoped that the confusion and the delay in performing the necessary operations so often existing after a battle will be avoided, and all operations hereafter be *primary*.

The remaining medical officers of the division, except one to each Regiment, will be ordered to the Hospital to act generally as assistants and dressers.

Those who follow regiments to the field will establish themselves, each one at a temporary depot, at such a distance or situation in the rear of his regiment as will insure safety to the wounded, where they will give such aid as is immediately required; and they are here reminded, that whilst no personal consideration should interfere with their duty to the wounded, the grave responsibilities resting upon them render any unnecessary exposure improper.

The Surgeon-in-Chief of the Division will exercise general supervision, under the Medical Director of the Corps, over the medical affairs in his Division. He will see that the officers are faithful in the performance of their duties in the Hospital and upon the field, and that, by the Ambulance Corps which has heretofore been so efficient, the wounded are removed from the field carefully and with dispatch. Whenever his duties permit, he will give his professional service at the Hospital, and will order to the Hospital, as soon as located, all the Hospital wagons of the brigades, the Hospital tents and furniture, and all the Hospital stewards and the nurses. He will notify the captain commanding the Ambulance Corps, or, if this be impracticable, the first lieutenant commanding the division ambulances, of the location of the Hospital.

No medical officer will leave the position to which he shall have been assigned without permission; and any officer so doing will be reported to the Medical Director of the Corps, who will report the facts to this office.

Medical Directors of Corps will apply to their Commanders on the eve of a battle for the necessary guard and men for fatigue duty. This guard will be particularly careful that no stragglers be allowed about the hospital, using the food, &c., prepared for the wounded.

No wounded will be sent away from any of these Hospitals without authority from this office.

Previous to an engagement a detail will be made by Medical Directors of Corps of the proper number of medical officers, who will, should a retreat be found necessary, remain and take care of the wounded. This detail the Medical Directors will request the Corps Commanders to announce in orders.

The skilful attention shown by medical officers of this army to the wounded upon the battle-fields of South Mountain, Crampton's Gap, and Antietam, under trying circumstances, gives the assurance that, with this organization, the Medical Staff of the Army of the Potomac can with confidence be relied upon under all emergencies to take the charge of the wounded entrusted to its care.

JONA. LETTERMAN,
Surg. and Med. Director.

CORPS OF VOLUNTEER SURGEONS.—The following named gentlemen having been examined and approved by the U.S.A. Medical Boards, have been appointed to take rank as follows, to date from November 7, 1862:—

SURGEONS.—ALEXANDER B. MOTT, New York; WILLIAM B. BREED, Pennsylvania; PLINEY A. JEWETT, Conn.; JOHN J. REESE, Pa.; JOHN O. BRONSON, Conn.; AUGUSTUS C. BOURNONVILLE, Pa.; WILLIAM S. FORBES, Pa.; T. B. GIBBONS, Pa.; FRED. S. AINSWORTH, Mass.; FRANCIS SALTER, Ohio; HOWARD CULBERTSON, Ohio; JAMES C. WHITEHILL, Illinois.

Assistant-Surgeons.—Robert R. Taylor, Pa.; E. D. Kitloe, Ill.; A. T. Woodward, Vt.; Lewis D. Harlow, Pa.; William Watson, Iowa; Charles E. Swasey, N.H.; Caleb W. Horner, Pa.; H. M. Crawford, Ill.; Louis W. Reed, Pa.; M. H. Picot, Pa.; William S. Edgar, Ill.; Edward J. Whitney, Md.; Edwin Freeman, Ohio.

Orders.—Surgeon D. W. Hand, U.S.A., has been placed on duty as Medical Director of Gen. Peck's Division, at Suffolk, Va., relieving Surg. A. D. Gall, 13th Indiana Vols.

Surgeons H. J. Churchman and Barton Darrach, U. S. Vols., have reported to Assist. Surgeon-General Wood, at St. Louis, Mo.

Dr. H. Eversman, lately in charge of Camp Dennison Hospital, has been directed to report to Surgeon Head, at Louisville, for duty in charge of the General Hospital, Lexington, Ky.

Surgeon William Varian, U. S. Vols., has been relieved from duty at New Albany, Ind., and ordered to report to Maj. Gen. G. Granger, Army of Kentucky.

Surgeon Burkitt Cloak, U. S. Vols., has been assigned to the charge of the hospitals at Camp Dennison, Ohio.

Surgeon Goldsmith, U. S. Vols., to duty in charge of the internal arrangements of the General Hospitals at Louisville, Ky.

Surgeon J. V. Z. Blaney, U. S. Vols., has been ordered to turn over the property in his charge (as Medical Purveyor at Alexandria, Va.) to the Medical Purveyor at Washington, and report for duty to Gen. Viele at Norfolk, Va.

Medical Storekeeper H. Johnson, U.S.A., has relieved Surgeon C. H. Laub, U.S.A., as Medical Purveyor at Washington, D.C. Surgeon Laub to report to the Surgeon-General for orders.

Surgeon James King, U. S. Vols., late Medical Director of the Pennsylvania Reserve Corps, has resigned his commission, having been appointed Surgeon-General of the State of Pennsylvania by Governor Curtin.

Assist. Surgeon Van Duyn, U. S. Vols., has been placed on duty at Jefferson Barracks, Mo.

Surgeon Josiah Simpson, U.S.A., has assumed the duties of Medical Director at Harper's Ferry.

Medical Storekeeper R. T. Creamer, U.S.A., has been ordered to relieve Assist. Surgeon C. T. Alexander, U.S.A., as Medical Purveyor at St. Louis, Mo. Assist. Surgeon Alexander, on being relieved, to report to Assist. Surgeon-General Wood, U.S.A., at St. Louis, for duty.

Assist. Surgeons R. O. Craig, U.S.A., and A. M. Clark, U. S. Vols., have been ordered to report to the Medical Director, Army of the Potomac, for duty.

Surgeon J. P. G. Baxter, U. S. Vols., on leave of absence, to report to Maj. Gen. Banks.

Assist. Surgeon H. R. Tilton, U.S.A., now on sick leave at Barnegat, N. J., to report to Assist. Surgeon-General Wood, at St. Louis, Mo.

Surgeon N. R. Mosely, U. S. Vols., now Inspector of hospitals at Frederick, Md., to report to Brigadier Gen. Abercrombie, U. S. Vols., as Chief Medical Officer of the troops under his command.

Surgeon A. M. Helman, 28th N. Y. Vols., having tendered his resignation, has been honorably discharged the service of the United States.

Assist. Surgeon R. Thomain, 41st N. Y. Vols., has been discharged the service, to date July 31st, 1862, for "absence without leave."

Assist. Surgeons Charles Heiland, 20th N. Y. Vols., and G. F. Stevens, of the 77th N. Y. Vols., have been dismissed the service of the United States for absence without leave.

Assist. Surgeon G. M. McGill, U.S.A., has returned to the Cliffburne Hospital, Washington, having been on temporary duty with the Army of the Potomac since the battle of Antietam.

Assist. Surgeon S. H. Horner, U.S.A., is engaged organizing an hospital at Camp Barry, Washington.

Assist. Surgeon B. A. Clements, U.S.A., has been relieved from duty in charge of the hospitals in Georgetown, D.C., and ordered to report to the Medical Director of the Army of the Potomac.

Surgeon F. S. Ainsworth, U. S. Vols., has been directed to report for duty in the 2d Division, General Hospitals, Alexandria, Va.

Surgeon G. W. Stipp, U. S. Vols., has relieved Assist. Surgeon Clark, in charge of the Union Hotel Hospital, Georgetown, D.C.

Assist. Surgeon L. M. Eastman, U.S.A., has relieved Surgeon Russell in charge of the Stewart's Mansion, Baltimore, Md.

Assist. Surgeon I. C. G. Happersett, U.S.A., has been relieved from duty with the 1st U. S. Infantry, and placed in charge of General Hospital No. 2, Jackson, Tenn.

Surgeon D. H. Agnew, U. S. Vols., has been assigned to duty as member of the Army Medical Board, at Philadelphia, for examination of Surgeons and Assist. Surgeons of Volunteers, relieving Assist. Surgeon W. C. Spencer, U.S.A.

Surgeon Bryant, U. S. Vols., has been directed to take charge of the Lincoln Hospital, Washington, D.C., in addition to his duties at the Cliffburne Hospital.

Surgeon E. E. Phelps, U. S. Vols., to repair to Brattleboro, Vt., for duty examining recruits.

Assist. Surgeon A. Woodhull, U.S.A., to report for duty to the Medical Director, Baltimore.

Assist. Surgeon W. F. Cornick, U.S.A., to report in person to the Surgeon-General for orders.

Assist. Surgeon John D. Lewis, 85th N. Y. Vols, has been dismissed the service without pay for absence without leave.

The resignations of Surgeons S. L. Bigelow, W. W. Strew, and Timothy Haines, U. S. Vols., have been accepted, to date Nov. 6, 1862.

Dr. Chas. H. Osborne has been ordered to report to Surgeon J. A. Lidell, U.S.V., in charge of the Stanton Hospital, Washington, D. C.

Assist.-Surgeon S. L. Orr, 3d Penn. Reserve Corps, to report to Surgeon J. Moses at Harewood Hospital, Washington, D.C.

Assistant-Surgeon J. W. S. Gouely, U. S. A., has been assigned to duty in the Office of the Surgeon-General.

Asst.-Surgeon W. M. Jones, U.S.V., has been directed to report for duty to Surgeon Edwin Bentley, U.S.V., in charge 3d Division General Hospital, Alexandria, Va.

Asst.-Surgeou Jas. L. Gillespie, 1st Virginia Vols. has been honorably discharged the service of the United States.

The muster into service of Asst. Surgeon J. B. Newbaker, 56th Penn. Vols., dated August 1st, 1862, has been revoked. He having tendered his resignation on account of disability, the rolls indicating that he never rendered service.

Surgeon Geo. Taylor, U. S. A., has been directed to assume charge of the General Hospitals at Newark, New Jersey.

Asst.-Surgeon J. W. Rugh, lately dismissed from the 5th Regiment Penn. Reserve Corps, has been restored.

Asst.-Surgeon W. L. Peck, 114th Ohio Vols., has been mustered out for promotion.

Surgeon W. S. Forbes, U.S.V., has been ordered to report for duty to Surgeon W. S. King, U.S.A., at Philadelphia, Pa.

Surgeou C. H. Laub, U. S. A., who since the breaking out of the rebellion has efficiently performed the duties of Medical Purveyor at Washington, D. C., has been ordered to report for duty to the Asst.-Surgeon-General, U.S.A., at St. Louis.

Surgeon T. B. Reed, U.S.V., has been directed to report to Major General Banks for duty.

Surgeon J. H. Rauch, U. S. Vols., has been directed to report to Maj. Gen. Banks for duty with General Augers' command.

Surgeon Geo. H. Hubbard, U. S. Vols., has been assigned

to duty as Medical Director Army of the Frontier, at Springfield, Missouri.

Surgeon F. G. Porter, Missouri State Militia, has been placed on duty as Medical Director of the troops under Brig. Gen. Jas. Potten.

Surgeon Chas. McMillan, U. S. Vols., has relieved Surgeon D. W. Hartshorne, U. S. Vols., as Senior Medical Officer of Gen. Sherman's command, Memphis, Tenn.

Assist.-Surgeon A. C. Van Duin, U. S. Vols., has been placed in charge of the hospital at Sedalia, Mo.

Surgeon Geo. Burr, U. S. Vols., has been dismissed the service of the United States, for drunkenness.

Surgeon T. W. Fry, U. S. Vols., has been assigned to hospital duty at Louisville, Kentucky.

Surgeon Jas. D. Robison, U. S. Vols., has been granted leave of absence.

Surgeon B. Darrach, U. S. Vols., has been placed in charge of the hospitals at Camp Benton, near St. Louis, Mo., relieving Surgeon D. S. McGuigin, of the 3d Iowa Cavalry, who has been ordered to rejoin his regiment.

Surgeon H. A. Martin, U. S. Vols., has been assigned to duty at Ironton, Mo.

Surgeons J. R. McClurg and H. J. Churchman, U. S. Vols., have been assigned to duty at Jefferson Barracks, Mo.

Hospital Steward E. A. Duncan, 21st Iowa Vols., has been appointed Assist.-Surgeon 38th Iowa Vols.

Surgeon Sprague, of the 14th Vermont Vols., and Surgeon W. Hutchinson, of 22d New York Vols., have been discharged the service for incompetency.

Surgeon Thornhill, of the 8th Wisconsin Vols., has been dismissed the service of the United States for drunkenness and neglect of duty.

Surgeon Geo. W. Stipp, U. S. Vols., has been placed in charge of the Union Hotel Hospital, at Georgetown, D.C.

Surgeon D. W. Wainwright, U. S. Vols. has been placed on duty in the office of the Medical Director, Baltimore, Md.

Orders dismissing from the service Asst.-Surgeon G. B. Balch, 98th N. Y. Vols., have been revoked, and he will be restored to his position from August 19, 1862, provided the vacancy has not been filled.

Surgeon Peter Pineo, U. S. Vols. has been ordered to report to the Medical Director, Washington, D.C., to take charge of the Seminary Hospital, Georgetown, D.C.

Leave of absence for ten days has been granted to acting Asst.-Surgeon W. P. Morgan, U.S.A.

Surgeon C. P. Herrington, 138th Penn. Vols, on duty at Frederick, Md., has been ordered to rejoin his regiment without delay.

Surgeon W. H. Church, U. S. Vols., has reported for duty at Major General Burnside's Headquarters, from leave of absence.

Miscellaneous.—The Army Medical Board for examination of candidates for appointment in the Corps of Volunteer Surgeons, will in future hold their sessions in the City of Philadelphia, instead of West Philadelphia Hospital as heretofore.

The Army Medical Board at St. Louis, Mo., has been discontinued.

A Medical Board has been convened at Louisville, Ky., for the examination of candidates for appointment in the corps of Vol. Surgeons, to consist of Surgeons A. P. Meylert, R. L. Stanford, and M. Goldsmith, U. S. Vols.

Mr. Felton, the liberal President of the Philadelphia, Wilmington, and Baltimore Railroad, has ordered the construction of cars, specially fitted up for the transportation of the sick and wounded soldiers. The Surgeon-General has also requested Mr. J. W. Garret, President of the Baltimore and Ohio Railroad, to co-operate with Mr. Felton, in the good work.

The General Hospital at Wheeling, Va., has been discontinued.

The Medical Board now in session at Philadelphia, Pa., for the examination of candidates for the appointment of Assist. Surgeon in the Medical Staff of the Army, has been directed to adjourn on the 18th inst., and make a full report of its proceedings, so that the names of the approved candidates may be submitted for appointment to the War Department. Should there be, however, any candidates awaiting examination, the Board will, after making its report, immediately reassemble as a new Board, and proceed as before.

Capt. J. C. Crane, Quartermaster at Frederick, Md., has been directed by the Quartermaster General to erect three or four buildings for hospital purposes, similar to those already in use there.

Surgeons in charge of hospitals in Washington and vicinity have been directed to send all persons afflicted with eye and ear diseases to the General Hospital on Judiciary Sq., where a ward has been set apart for such cases.

Medical Cadet Daniel D. Gilbert, U S.A., having passed a successful examination, has been appointed Acting Assist. Surgeon in the U. S. *Navy*.

Medical News.

DEATH OF DR. FRANCIS R. LYMAN.

At a meeting of the Medical Staff of Bellevue Hospital, held on the 19th inst., for the purpose of expressing their sentiments concerning the death of their late associate, Dr. Francis R. Lyman, a committee was appointed to draft resolutions, and the following were presented and unanimously approved:—

Whereas, An all-wise Providence has deemed it fit to remove from his career of usefulness our friend and late associate Dr. Francis R Lyman, who died on Friday, the 14th of November, 1862, while engaged in the prosecution of his duties as Assistant-Surgeon in the Harewood Hospital, Washington city:

Therefore be it resolved, That in his death we feel that each one of us has lost a true friend, our institution one of its brightest ornaments, and the profession a disciple whose early attainments gave promise of a most brilliant career.

Resolved, That a copy of these resolutions be presented to the family of our late friend, with whom we sincerely sympathize in their affliction.

Resolved, That the resolutions be published in the American Medical Times, *Tribune*, *Herald*, and *Times*.

Wm. C. Peter, Munson Coan, Wm. T. Nealis, } *Committee.*

The Committee appointed by the French Government to inquire into the sanitary condition of French hospitals has commenced operations. The Minister of the Interior, the President, opened the meeting, assisted by M. Dumas, Rayer, and most of the French medical celebrities. The minister stated that the Emperor was surprised at the facts advanced at the discussion which took place at the Academy of Medicine, concerning the hygienic state of hospitals; and, in his solicitude for the good of the poor, he had formed this Committee, that they might inquire whether or not ameliorations could be introduced into these establishments. Above all, he asked of them that they should, besides studying the question fully and deeply, endeavor at once to recommend some means whereby the mortality might, if possible, be immediately diminished.—*Brit. Med.. Jour.*

Several distinguished members of the medical profession have occupied the Chair of President of the Royal Society; but Sir Benjamin Brodie is the only surgeon who has been advanced to that dignity. Sir Hans Sloane, Sir John Pringle, and Dr. Wollaston, are the three distinguished physicians who have held the office of President. Sir Humphry Davy could not be, with any propriety, called a member of the medical profession.—*Brit. Med. Jour.*

Original Lectures.

LECTURES
ON THE
DIAGNOSIS OF DISEASES OF THE HEART.

DELIVERED AT THE
BELLEVUE HOSPITAL MEDICAL COLLEGE DURING THE PRELIMINARY TERM.
SESSION 1862-63.

BY AUSTIN FLINT, M.D.
PROFESSOR OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

LECTURE VIII.

Retrospective Diagnosis of Pericarditis, or the Signs of Pericardial Adhesions.—Pathological Relations of Pericarditis.—Physical Changes in Endocarditis.—The Diagnosis of Endocarditis Based on the Development of an Organic Endocardial Murmur.—Inorganic Murmur in Endocarditis.—Relations of the Disease to Acute Rheumatism.—Importance of the Diagnosis of Functional Disorder of the Heart.—Varieties of Functional Disorders; the Diagnosis Based on the Exclusion of Organic Lesions.—Combination of Organic Lesions and Functional Disorder.—Symptoms Diagnostic of Functional Disorder.—Conclusion of Course.

GENTLEMEN:—In my last lecture I considered the diagnosis of pericarditis, prior to liquid effusion, during the second stage, or stage of effusion, and during the third stage, or stage of absorption. We may, in some cases, at least, make a retrospective diagnosis of this disease; in other words, we can determine the fact of the past occurrence of pericarditis, during convalescence, or at any period subsequent to recovery. After the removal of the effused liquid, by absorption, the pericardial surfaces come into contact. The surfaces become agglutinated by means of the coagulable lymph with which they are more or less covered. And, after a time, in this intermediate lymph, adventitious tissue is formed, which leads to a permanent vital union. Pericardial adhesions, thus, follow pericarditis, as pleuritic adhesions follow inflammation of the pleura. If these are universal or extensive, their existence may be ascertained, often, if not generally, by physical signs. The retrospective diagnosis is based on the signs denoting adhesions of the pericardium. What are the signs representing this consequence of pericarditis?

The base of the pericardial sac is considerably larger than the pointed extremity of the heart; and as the apex is free, it has, in health, a lateral range of motion corresponding to the greater width of the sac. The apex-beat is found, in health, to move from half an inch to an inch, in changing the position of the body from recumbency on the back to a decubitus on the left side. But if the pericardial surfaces are adherent, there is little or no range of motion, the apex remaining fixed in the same spot in all changes of the position of the body. This is the most reliable of the signs denoting past pericarditis; but it is not positive proof, for physical conditions extrinsic to the pericardial sac may prevent the lateral movements of the apex, such as pleuritic adhesions, etc.* Other evidence consists in permanency of the area of the superficial cardiac space; that is, its remaining the same at the end of the inspiratory, as at the end of the expiratory act. In a normal condition of the organs, the increased expansion of the left lung by the inspiratory act, especially if the act be forced, causes a diminution of the superficial cardiac space, as ascertained by percussion. But after pericarditis, often, if not generally, adhesions take place, not only of the surfaces of pericardium which are in contact, but between the outer surface of the fibrous sac and the parts with which it is in contact. In this way the superficial cardiac space is made permanent, and continues the same in inspiration as in expiration. Other evidence, still, in certain cases, consists in retraction of the intercostal spaces within the præcordia, of the epigastrium, and, sometimes, of the extremity of the sternum, during the heart's systole. These signs will enable us frequently to decide that a patient, at some period before coming under our observation, has had pericarditis. And I may remark, in leaving the subject of pericarditis, that adhesions, even when so universal and complete that the pericardial sac is abolished, have not that serious import which they were supposed to have a few years ago. If uncomplicated with valvular lesions, they may give rise to no appreciable inconvenience for an indefinite period.

A single additional remark respecting the diagnosis of pericarditis. Its pathological relations are to be kept in mind. In the vast majority of the cases in which it is not traumatic, it is developed in connexion with either acute rheumatism or disease of the kidneys. Recollecting this, we should direct our attention to the heart in these diseases, and seek for the diagnostic signs of pericardial inflammation.

I come now to consider the diagnosis of inflammation of the lining membrane of the cavities of the heart, or *endocarditis*. And with reference to this disease, the statement made concerning pericarditis is equally, if not even more applicable, viz. the diagnosis rests upon the evidence furnished by physical exploration. Not only was this disease not discriminated prior to the successful application of auscultation to affections of the heart by the successors of Laennec, but the disease has been discovered within the latter period; its existence was unknown in Laennec's day.

What are the physical changes which belong to endocarditis? The endocardium is analogous in its structure to the serous membranes, and when inflamed there occurs the exudation of lymph, as in serous inflammations. More or less of this lymph is washed away by the currents of blood; but more or less remains adherent to the membrane, and chiefly, to the portions which invest the valvular curtains and segments. The endocardial lining of the cavities of the left side of the heart is the seat of the inflammation in endocarditis occurring after fœtal life, so that the exudation of lymph takes place on the parts which form the mitral and aortic valves. On one or both these valves the lymph collects in the form of bead-like deposits, or vegetations. Probably they increase in size by the addition of coagulated fibrin from the blood contained in the cavity of the left ventricle. These lymph-deposits lay the foundation of the valvular lesions, to which we have already given attention. After the lapse of a greater or less period, cretaceous matter is apt to be deposited; the valves may become contracted, or thickened; they may become adherent to each other, or to adjacent parts; rupture may take place, etc., leading, in the end, to contraction, or insufficiency, or both. Here are several specimens, illustrating the existence of recent vegetations on the aortic and mitral valves, obstructive and regurgitant lesions not having as yet taken place.

A deposit of even a small quantity of lymph at either the mitral or aortic orifice, suffices to give rise to an endocardial or bellows murmur with the first sound of the heart. The diagnosis is based on the presence of a systolic murmur, taken in connexion with the circumstances under which it is developed. The latter qualification is essential. Endocarditis almost invariably occurs in one pathological connexion, viz. in the course of acute articular rheumatism. The diagnosis rests on the production of a murmur during the progress of the disease just named. Endocarditis may possibly occur as a primary or idiopathic affection, but practically I have no knowledge of it, except as a complication of acute rheumatism. What circumstances, then, connected with the production of an endocardial murmur, or murmurs, in the course of acute rheumatism, warrant the diagnosis of endocarditis?

It is not sufficient for the diagnosis that an endocardial murmur is found to exist in a case of rheumatism. The murmur may have existed prior to the rheumatic affection.

* As an effect of pericardial adhesions, in some cases, the apex-beat is not to be felt.

If the patient have had rheumatism before, endocarditis may have occurred with the previous attack, leaving a permanent murmur. For the diagnosis to be positive, the murmur must have originated while the case is under our observation; that is, we must have examined the patient when there was no murmur, and thus determined the fact that the murmur has been developed since the attack of rheumatism. If we have not this evidence of the development of the murmur, we can only judge of the probability of existing endocarditis. And the circumstances bearing on this judgment are:—First, the absence of enlargement of the heart. If the heart be enlarged, it is altogether probable that the murmur was antecedent to the rheumatism. Second, the kind of murmur present. An aortic regurgitant murmur does not belong to endocarditis. This murmur represents organic lesions which may follow but do not accompany endocarditis. The same remark holds good with respect to a mitral direct murmur. This murmur does not belong to endocarditis, but to subsequent lesions. It is certainly rare that a truly mitral regurgitant murmur occurs in endocarditis. The mitral valve is not rendered insufficient by existing inflammation. The murmur of endocarditis is a mitral systolic murmur, but as a rule, a murmur without actual mitral regurgitation. It has its maximum near the apex of the heart; is diffused, more or less, over the body of the organ, but does not extend far without the heart, *i.e.* to the lateral surface of the chest and over the back, as it does when the murmur is due to mitral insufficiency.

The inflammatory deposits in endocarditis occur oftener at the mitral than at the aortic orifice; but they do occur at the latter. Hence, an aortic direct murmur may be developed as a sign of endocarditis. The mitral systolic and aortic direct murmur are not unfrequently combined in cases of rheumatism. This may indicate inflammatory deposits at both orifices; but I have been led to believe that an aortic direct murmur occurs in cases of rheumatism without endocarditis. On careful exploration with Cammann's stethoscope, I have found a murmur either in the aorta, or in the pulmonic artery, or in both, to be the rule in cases of rheumatism. I am disposed to regard these basic murmurs as frequently, if not generally inorganic, *i.e.* due to a blood change. I suspect these murmurs may have led to the opinion, with some clinical observers, that endocarditis is a more frequent complication of rheumatism than it really is. This point needs further clinical study, but at present, to my mind, a newly-developed murmur, to be evidence of endocarditis, must be a mitral or intraventricular murmur.

A murmur due to endocarditis may disappear after the recovery from rheumatism. I have known this to be the case. I suppose that its disappearance is owing to the inflammatory deposits having been completely washed away by the currents of blood. I think, however, that as a rule, the murmur is permanent; and if organic lesions follow at a period more or less remote, new organic murmurs may be added.

As I have already stated, we derive no aid in the diagnosis of endocarditis from the symptoms. The disease, so far as symptoms are concerned, is latent. Hence, it is only within a few years that attention has been directed to it, and its existence known. The basis of the diagnosis is, simply, the development of an organic murmur during the progress of acute rheumatism; the endocarditis may occur at any time during the course of acute articular rheumatism, but usually it occurs during the first week. We look for it oftenest in cases which are most acute. I should mention that, as a rare exception to the rule, it sometimes occurs before the articulations become affected.

I come, lastly, gentlemen, to consider the diagnosis of functional disorder of the heart. And, although this concluding subject will require but a brief consideration, its importance is very great. Functional disorder of the heart is of frequent occurrence. It occasions great anxiety and apprehension. Patients fear they have an organic disease, and that they are liable, at any time, to sudden death. They come to us often in a state of the greatest possible mental distress. Now, if the trouble be simply functional, we can assure them of the absence of all danger, and a positive assurance that the heart is sound will go far towards affording relief, for the functional disorder is generally aggravated and kept up by mental uneasiness and concentrating the attention on the disturbed organ. If the practitioner have confidence in his skill in diagnosis, he can thus be of great service to these patients, and, at the same time, acquire credit for professional knowledge. But if, on the other hand, he lack the ability to decide in such cases, he is led to do one of two things; he either decides, at a venture, that the patient has or has not, organic disease, or he expresses himself in a doubtful, non-committal manner. Whichever course he takes, he incurs risk of doing harm and falling into discredit. If he decide that the patient have not organic disease, perhaps after a few weeks or months it becomes evident he was in error. If he decide that the patient has organic disease, when the trouble is purely functional, the consequence is often most unfortunate. I could cite cases of persons affected only with functional troubles, who had given up all active pursuits and hopes in life, and lived in daily expectancy of sudden death for years, after having been told that they have organic disease and might die suddenly at any moment, by medical advisers. The consequence of giving a doubtful opinion is apt to be equally disastrous, for the patient falls back on his own imagination, or he thinks the physician is satisfied of the existence of organic disease, but refrains from communicating the truth. In short, gentlemen, there is hardly a problem in diagnosis of more importance than to determine whether the disturbed action of the heart does, or does not, involve organic lesions. Before I ask how this is to be determined, let us for a moment consider the varieties of functional disorder of the heart.

It is common to include all kinds of disordered action under the head of *palpitation*, which means, strictly, increased action of the heart. Frequently, the only evidence of disorder is increased action; the organ beats with abnormal force and quickness; the patient is sensible of its abnormal activity; it seems to strike against the chest with violence, and patients sometimes describe a sensation as if the organ had escaped from its proper situation, and had risen to the throat. In some cases, this excessive action of the heart persists for days and weeks; but generally it occurs in paroxysms, with variable intervals, lasting from a few moments to several hours. The action may be simply excessive, but in other respects regular—generally, however, the action is irregular. Frequently the organ acts with great disorder for a few beats and then becomes more regular; when the tumultuous action occurs, it seems to the patient as if some extraordinary and unnatural movements were taking place. In other cases, the action of the organ, from time to time, is arrested for an instant; the beatiug intermits, and the patient feels at each intermission as if the action might cease entirely. These irregular movements are, in fact, due to a kind of clonic spasm of the muscular walls of the heart.

How are we to determine that the forms of disorder, just briefly sketched, are exclusively functional? The answer to this question is very simple; we are to exclude organic lesions. We make physical exploration with sufficient care to discover the signs of organic lesions if they are present, and if the signs of organic lesions are wanting, we exclude them, and decide that functional disturbance alone exists. We can thus reach a positive diagnosis if we are confident in our ability to recognise the physical signs of organic disease. Let us suppose a patient to present himself with symptoms which have led him to apprehend disease of the heart; and that we proceed to explore with reference to the existence or non-existence of organic lesions. We may direct our attention first, to ascertain whether the heart be, or be not enlarged. We find the apex-beat in the normal situation, the superficial cardiac region not increased, and

the left border of the organ within or at the left nipple. We conclude, then, there is no enlargement. We next, auscultate for murmurs. If no murmurs are present, we decide that valvular lesions do not exist. If there be an aortic direct murmur, we may decide that it is inorganic. We compare the aortic and pulmonic second sound of the heart, and find that their normal relative characters are present. These results show the absence of organic disease. We are sure that the affection is purely functional, and we are warranted in giving the patient positive assurances that his heart is sound and that he is in no danger. A few moments devoted to the exploration is sufficient to enable us to reach this conclusion. It is reached so quickly that I sometimes prolong the exploration unnecessarily, lest the patient should think I had not taken time enough to ascertain all the facts.

There is an important topic connected with the subject of functional disorders of the heart, which I must not pass by. Functional disorder and organic lesions may be combined—I mean that a patient with organic lesions may suffer from functional disorder, not arising from the lesions, but from the same causes which give rise to functional disorder in those whose hearts are sound. For example, anæmia, which so often leads to functional disorder alone, may equally give rise to disorder when it co-exists with organic lesions. Without giving due consideration to the fact, the practitioner may attribute the disturbed action of the heart, where functional disorder and organic lesions are combined, exclusively to the latter, and be led thereby to take a more unfavorable view of the case than the nature and extent of the lesions justify. Practically, it becomes a highly important question in certain cases, how much of the existing disturbance is due to lesions, and how much to superadded functional disorder. We must endeavor to form an opinion on this point by ascertaining as far as we can the amount of danger which the lesions have occasioned, and also taking into account circumstances favorable for the production of functional disorders. As a rule, if the heart be but little enlarged, and the evidence of fatty degeneration of the walls be wanting, the lesions, whatever they may be, should not be expected to occasion much distress.

The symptoms attending functional disorder of the heart, although not sufficiently distinctive for a positive diagnosis, without the results of physical exploration, are, nevertheless, not without considerable significance. Functional disorder causes much more mental uneasiness than organic disease. The difference in the mental state of patients with and without organic disease is striking. Patients with organic disease, generally have not that intense anxiety and apprehension which belong to functional disorder. They receive the announcement of the existence of lesions with equanimity. They are often slow to believe that the heart is affected. On the other hand, persons with no organic disease frequently have such a strong conviction of the existence of disease, that they are not easily persuaded of the fact of its non-existence; and they often ask to be examined repeatedly, being fearful that it has been overlooked; they require the most positive assurances to secure their belief. This difference in the mental state possesses some diagnostic significance.

Again, functional disorder manifests itself generally in paroxysmal disturbance, and in the intervals the patient may be free from all symptoms of disorder. If a patient, at times, be able to take active exercise without any abnormal disturbance of the heart's action or want of breath, the probability is that the paroxysms denote only functional disorder. If the paroxysms occur from mental excitement, or without any obvious cause, and oftener in the night than in the day time, they are more likely to be due to functional disorder than to organic disease. These, and other circumstances are to be considered; but the main reliance in the diagnosis is, on the absence of all the physical signs of lesions, or on the evidence afforded by the signs of lesions which are inadequate to produce the amount of disturbance which is present.

I have now, gentlemen, brought to a close my short course of lectures on the diagnosis of Diseases of the Heart. I do not expect, however, with the conclusion of these lectures, to leave the consideration of this interesting and important province of practical medicine. In pursuing together our clinical studies during the session, we shall continue to consider the diseases of the heart, not only with reference to diagnosis but as regards their morbid anatomy, their pathological relations, their causes, and their management. We shall have abundant opportunities to observe the application, at the bed-side, of the rules which have been laid down in this course of lectures; and, in the cases which baffle our therapeutical resources, I shall test the reliability of our means of diagnosis by placing before you the facts revealed by the scalpel.

Original Communications.

CASE OF ALLEGED DEATH FROM CHLOROFORM.

By ADDISON NILES, MD.,
OF QUINCY, ILLINOIS.

I was called on Tuesday afternoon, June 3, 1862, to attend Mrs. W——, a primipara. This being my first visit I was struck by her bloated appearance, and on examination found the lower limbs œdematous. For two years previous she had been afflicted with frequent and painful micturition, the secretion being scanty. She likewise suffered from headache at times, and habitual costiveness, for which latter difficulty she had been accustomed to take purgatives. In childhood she had scarlet fever, from which she recovered with difficulty, after a dangerous and protracted illness of two months.

The membranes had spontaneously ruptured, and the liquor amnii had discharged before I arrived. The os was not dilated, and the pains were moderate. Some time in the evening they became more aggravating, and she desired to inhale ether, which was administered through Luther's inhaler. In consequence of the large volume of air which the inhaler admits, the desired effect was not produced, and vomiting occurred several times. After some hours, the patient not being brought sufficiently under the influence of the anæsthetic, a mixture of five parts of ether and one part chloroform was substituted, the vomiting then ceased, and the anæsthetic was carried far enough to blunt the sensibility to pain, but did not destroy consciousness.

On Wednesday evening the os dilated sufficiently to admit of artificial delivery. Before undertaking it, she was permitted to pass one hour without the anæsthetic, to observe what progress would be made—but the pains diminished in power after sensibility was restored.

Considering that no hope could be entertained of saving the child by such a delay as would occur if the case were trusted to nature, it was decided to terminate the labor by the forceps. Preparatory to doing so an attempt was made to introduce the catheter, but owing to her extreme irritability it was found impossible for her to control herself sufficiently to submit to the operation. She was put under the influence of chloroform, which was administered by the inhaler. The article used was manufactured by Duncan and Flockhart.

After the forceps were applied, it was soon found that owing to the large and unyielding head, considerable time must elapse before the labor could be terminated. As the pulsatiou of the fœtal heart could not be detected, a question arose as to the best course to pursue. A consulting physician was called, and a decision made to persevere with the forceps, which accomplished the delivery about ten o'clock P.M., Wednesday, after a labor of about thirty hours. The child was in a state of asphyxia, and all efforts to resuscitate it proved unavailing.

After the labor she expressed herself as having been conscious during the whole time, and remarked she did not hear the baby cry; she rested quietly during the night, except occasionally calling for water, which she drank freely. On Thursday morning she examined the child, observing the hands and feet, said "she looked like her father." Her pulse was natural, but she complained of being tired. In the evening her pulse was considerably excited on; being asked how she did, she gave an unmeaning answer, and during the evening talked deliriously about e lucating the child, which she previously knew was dead. On Friday morning her pulse was quiet, and she had slept soundly, but was then somewhat delirious. During the day she seemed inclined to sleep, but would arouse when spoken to. She could not be persuaded to take nourishment. Friday evening she requested her lower limbs to be rubbed, and that a wet cloth be placed in her hands, and on her forehead; she was drowsy at night, but would wake at intervals, and make known her wants. About eleven o'clock said she was sick, but did not vomit; she afterwards wished to be turned on her side, and assisted herself in doing so, but afterwards seemed exhausted by the exertion. On Saturday morning she bade one of her friends good-bye as he left for home. During the day she slept most of the time. In the evening her mother said to her she was going home, she replied, "Why do you go?"

On Sunday morning she could be aroused to answer questions, but with difficulty; this was the last time she was known to speak. Monday she appeared unconscious, but would swallow liquid nourishment when placed in her mouth. Monday afternoon she had laborious breathing, and the pulse which had been 80 became 100 in a minute. Blood was observed in the mouth, and the tongue appeared to have been bitten. She had a free discharge of lochia and watery urine.

After many unsuccessful attempts, a specimen of urine was at length obtained, free from an admixture of other fluids. It appeared nearly destitute of saline matter; it was albuminous; on examination with the microscope it was found to contain an abundant deposit of granular epithelial casts and renal epithelium.

On Monday night the breathing became spasmodic—this was increased by the attempt to swallow fluids. Tuesday morning the pupils were dilated, the lips blanched, the countenance cadaverous, and the difficulty of breathing increased; twenty minutes past eleven o'clock death occurred.

Unfortunately no examination of the body was permitted. There can be no reasonable doubt but that the immediate cause of death was effusion in the brain and air cells of the lungs, caused by the poisonous action of urea retained in the blood, in consequence of the failure of the kidneys, from disease, to eliminate it. The non-occurrence of eclampsia during labor is probably due to the prophylactic influence of the anæsthetics. The blood observed in the mouth, and the injury done to the tongue, render it probable that a convulsion did occur at some subsequent time. The value of anæsthetics as a means of arresting or preventing puerperal eclampsia is now so well settled in the minds of the profession, that I feel as if no apology is due from me for using it in this instance.

Yet notwithstanding this, the case just related has been verbally reported by respectable practitioners in this city, as I am credibly informed, as one of death from chloroform, apparently not for the benefit of the profession at large, but to discourage its use in this city. If this report be truthful, it is proper that the first case of death from chloroform, occurring in the hands of medical men in the practice of obstetrics, be placed on record.

Dr. Snow, who wrote in 1858, has given a history of all the recorded deaths from chloroform, which occurred in surgical practice up to that time. It appears that in fifty cases reported, that dangerous symptoms followed speedily by death, occurred within three quarters of an hour after the inhalation commenced. Dr. Sanson presents the history of thirty-four cases which have occurred from the time of the publication of Dr. Snow's work, up to May 4th, 1861. The author combined them, and offers an analysis of the most salient points. Of all the cases only two occurred where a proper inhaler had been used. Of fifty-one cases, thirty-eight declared their danger by sudden stoppage of the pulse. Five deaths occurred in which there was great muscular excitement; collapse immediately following. Sudden vomiting and death occurred twice, congestion of the face was most marked in six, and cessation of breathing in eight. Dr. Sanson concluded that death occurred by syncope, and asphyxia, both of which are necessarily sudden. The author considered that the highest estimate of the number of deaths, to the number of inhalations, bore the proportion of one in two thousand. Others, however, consider this ratio of deaths to the inhalations, as greater than the facts will warrant.

I have referred to the history of twelve cases of death from chloroform in surgery, which have occurred since Dr. Sanson's cases were published; in all, death occurred in a few minutes after the inhalation commenced, from cardiac syncope. Practitioners in this city have had but little experience in the use of anæsthetics in obstetrics, and would doubtless be glad to be favored by the opinions of their brethren in New York, on the merits of the question, whether death in this case was, or was not, caused by chloroform. Besides, it is a question in which the profession at large is interested.

REMARKS ON ALBUMINURIA,

MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By AUSTIN FLINT, M.D.,

PROF. OF THE PRINCIPLES AND PRACTICE OF MEDICINE.

(*Concluded from* p. 300.)

I PASS to another question. The morbid appearances of diseased organs are only effects of disease. They denote results of morbid processes. Now, what morbid process or processes underlie the appreciable pathological conditions of the kidneys? According to Christison and Frerichs, the underlying process is congestion of the kidneys. Prof. Clark favors this view. As a speculative question—and the question is of necessity speculative—I am disposed to doubt the sufficiency of mere congestion to induce the various changes, although it is probably sufficient to give rise to albumen in the urine. We cannot, of course, have positive proof that congestion has preceded the morbid conditions which we discover after death; nor can we say when we find the kidneys merely congested, that had the patient lived, and this congestion persisted, it would have eventuated in any of the morbid conditions of Bright's disease. Evidence to my mind of the insufficiency of mere congestion is afforded by the following fact: Disease of the kidneys does not occur as a rule, when congestion of them must exist, and continue for a greater or less period, viz. in cases of cardiac valvular lesions with dilatation of the cavities on the right side of the heart. This statement may seem surprising to some whom I address. I shall presently refer to the grounds for the correctness of the statement.

Johnson and others consider acute albuminuria as consisting in inflammation of the lining membrane of the convoluted tubes. Johnson styles this disease *acute desquamative nephritis*. He regards it as a kind of catarrhal inflammation, characterized by the exfoliation of epithelium and exudation of lymph; and the casts in the sediment of the urine composed of these morbid products is to this inflammation, what the expectoration is to the bronchitis. Indeed, I think it is Barlow who calls this disease by a title which involves a solecism, but nevertheless is significant, viz. *renal bronchitis*.

So, in chronic albuminuria with atrophied kidney, Johnson considers the morbid process inflammation, the disease taking as its point of departure the lining membrane of the tubes; the inflammation being subacute and chronic; and

leading, after a time, to disintegration and destruction of the secreting tissue. These views seem to me reasonable.

With regard to the chronic disease, characterized by the presence of morbid deposits which remain and produce enlargement of the kidneys, we must wait for further light, rendering clear the character and point of departure of the underlying processes.

The idea has been suggested that morbid reflex influences, involving the ganglionary nervous system, are concerned in the production of the morbid conditions of the kidneys. This throws us back on the sufficiency of congestion; for the morbid influences supposed to be transmitted from some other local affection, are thought to produce congestion by paralysing the forces carrying on the circulation within the kidneys. It may be added that, in the great majority of the cases of albuminuria, there are no obvious antecedent local affections of other parts sustaining relations to the kidneys through the ganglionary system.

The pathology of albuminuria probably extends further backward, or deeper, than the kidney affections. Morbid conditions of a more general nature are involved. When an affection of the kidneys complicates or follows scarlatina, with our present humoral views, we suppose there is a special poison in the blood which acts upon the renal organs. There are grounds for supposing antecedent blood-changes in other cases. Perhaps this is sufficiently shown in all cases by a fact which seems to me not to have been sufficiently dwelt upon. I refer to the law of parallelism as applied to the morbid condition of the kidneys. Albuminuria in its different forms belongs among the symmetrical diseases. Both renal organs are affected in a similar manner, and in about the same degree. This fact certainly holds good in the vast majority of cases. If one kidney be enlarged, the other is enlarged likewise, and so with respect to atrophy. We did not find one organ enlarged and the other atrophied. The enlargement, or the atrophy, is usually equal in the two organs. If one kidney be fatty, so is the other, etc. This law of parallelism is generally considered as, in itself, sufficient proof of the dependence of local affections on antecedent blood-changes. And as regards our ignorance of the nature of the antecedent blood-changes in albuminuria, we are not more in the dark than with respect to other affections, for example, tuberculosis, in which their existence is considered as logically proved. In pulmonary tuberculosis, too, as in albuminuria, the general morbid condition may not reveal itself by any appreciable morbid phenomena prior to the development of the local affection.

I come now to a branch of the pathology in which our knowledge appears to be somewhat more complete and satisfactory, viz. the relations of the symptomatic events belonging to the clinical history of albuminuria, to the immediate pathological effects of the morbid conditions of the kidneys. Taking, as a clue, the excretion of albumen incidental to interference with the circulation in the kidneys, and the non-elimination of urea incident to interference with the secretory function of the kidneys, we are guided through much of the labyrinth of the clinical history.

First, let us consider the relation of the excretion of albumen to dropsy, that symptomatic event which is so frequent in cases of albuminuria. The loss of albumen diminishes the density of the blood. The specific gravity of the blood-serum has been known to fall from 1.030, the normal standard, to 1.010. We can understand that this effect upon the blood favors dropsical effusion. Moreover, the loss of albumen impedes the capillary circulation, and thus leads to congestion. Majendie, many years ago, showed that the *viscosity* of the blood, due to its fibrin and albumen, was necessary to its free circulation. We can understand that dropsy may, in part, arise from the impaired viscosity of the blood. Again, in some cases of albuminuria the amount of water eliminated through the kidneys is much diminished. We can understand that the accumulation of water in the blood (Hydræmia) may conduce to the occurrence of dropsy. The dropsy, *ceteris paribus*, is generally found to be in proportion to the abundance of the albumen in the urine, and the duration of the albuminuria. The invariable occurrence of dropsy in acute albuminuria, and in chronic albuminuria with the large kidney, is explained by the interference with the circulation in the renal organs in these diseases; and, on the other hand, the lesser amount of dropsy, and the occasional absence of this event, in chronic albuminuria with the small kidney, are explained by the fact that, in this disease, the interference is not so much with the circulation as with the secretory function of the kidneys.

The loss of albumen, in the second place, accounts for the anæmia which is so common an event in the clinical history of acute albuminuria and chronic albuminuria with the large kidney. While it is still a problem in physiology when and how the red corpuscles of the blood are produced, this is certain: they depend upon a normal quantity of albumen of the blood. And if the albumen of the blood be diminished by disease, the red corpuscles decrease, and anæmia is accordingly a result. The anæmia in cases of albuminuria, *ceteris paribus*, is in proportion to the amount of loss in albumen which the blood sustains in consequence of its excretion in the urine. The loss of albumen, in fact, accounts for the fatal result in those cases in which death occurs purely from asthenia, without any manifestations of uræmic poisoning.

The relations of retention of urea are not less intelligible. We have, first, vomiting and purging, as events in the clinical history, arising from the effort of nature to eliminate the urea vicariously through the mucous membrane of the alimentary canal. The experiments of Bernard and Barneswill have shown that, when the kidneys are removed in inferior animals, the urea, accumulating in the blood, finds its way, for a time, into the alimentary canal, being generally converted, after its elimination, into the carbonate of ammonia, but sometimes found unchanged in the intestines. The vomiting and purging which occur in cases of albuminuria, are, therefore, conservative, a fact of much importance in its bearing on therapeutics.

Next, certain intercurrent inflammations are attributable to the accumulation of urea in the blood. Inflammations of serous structures, more especially peritonitis, pleuritis, pericarditis, occur in the course of albuminuria sufficiently often to show a pathological connexion; they occur oftenest in chronic albuminuria with small kidney, but not unfrequently in acute albuminuria, and it is fair to attribute their occurrence to the action of urea. The neuralgic pains which are apt to occur in cases of albuminuria, probably have the same origin.

Lastly, the convulsions and coma which in a certain proportion of cases bring to a fatal termination the diseases included under the name of albuminuria, proceed from uræmic poisoning. Fatal uræmia occurs in each of the three diseases, but it occurs by far most frequently in chronic albuminuria with the small kidney. And as cases of chronic albuminuria with the large kidney sometimes end fatally by asthenia without any manifestations of uræmia, so cases of chronic albuminuria with the small kidney sometimes end fatally without any of the phenomena dependent on the excretion of albumen, and even without the presence of albumen in the urine.

My remarks on the causation of albuminuria, Mr. President, will be brief.

In acute albuminuria a special poison in the blood is supposed to exist. Analogy might suggest the probable existence of a special morbific agent in other cases. But as bronchitis, in its epidemic form (influenza), is due to a special cause, and as it ordinarily occurs is supposed to be produced by ordinary causes, the same may be true of this disease. I have not had time to analyse cases with respect to the point, but my impression is that acute albuminuria, when not connected with scarlatina, is apt to follow some unusual exposure to cold.

Chronic albuminuria we have seen to be slow and insidious in its development. Probably, in general, when cases

first come under the cognisance of the physician, albumen in the urine has already existed for months or even years. The causes, whatever they may be, are gradual in their operation.

Clinical facts do not appear to show connexion with any antecedent, appreciable local affections of other parts than the kidney, which may be suspected of sustaining a causative relation to the pathological conditions in albuminuria.

There does not seem to be ground for supposing that a hereditary influence is involved in the causation.

As regards the influence of age, an analysis of fifty-two cases of albuminuria which I have recorded (exclusive of cases connected with scarlatina), gives the following results:—Under ten years of age, no cases; but the majority of cases analysed were in hospital practice, and patients under ten are rarely admitted into hospitals. Over ten and under twenty, three cases; over twenty and under thirty, twenty-one cases; over thirty and under forty, fourteen cases; over forty and under fifty, nine cases; over fifty and under sixty, three cases; over sixty and under seventy, two cases; over seventy, no cases. These results show diminished liability to albuminuria as the two extremes of life are approached. The greatest liability is between the ages of twenty and forty.

As regards sex, of fifty-seven cases, forty-four were males and thirteen females. Some of my cases were collected when I was attending exclusively male hospital wards, and some when attending exclusively female wards. Undoubtedly, males are much more liable to become affected with albuminuria than females.

An interesting point of inquiry relates to habits as regards the use of alcoholic drinks. In the analysis of my cases, with respect to this point, I have separated the hospital cases from those observed in private practice. The habits were noted in the histories of twenty-seven hospital cases. Of these twenty-seven cases, in two only were the habits strictly temperate; but we all know how rare it is to find patients in a public hospital who are perfectly temperate. Of the remaining twenty-five cases, seven were hard spirit drinkers, three were beer drinkers, and five drank moderately or only occasionally. Of cases in private practice, the habits were noted in ten. Of these ten cases, in nine the habits were temperate; one patient only was intemperate. In saying that the habits were temperate in these cases, I mean that the patieuts were not habitual drinkers, nor accustomed to occasional excesses, that all were absolutely teetotallers. The facts just stated go to show that albuminuria is not *par excellence* induced by intemperance. Goodfellow's opinion respecting the dependence of the contracted kidney on the use of alcoholic drinks, is certainly not tenable. To support his opinion he is obliged, in one of his cases, to attribute the production of the disease to the inhalation of the vapor of spirit. A case has very recently come under my observation, in which, as judged by the symptoms, there existed the contracted kidney, the patient having since died with uræmic poisoning, and this patient, a man over fifty years of age, had always been perfectly temperate.

I have never observed the association of gout and the contracted kidney. Dr. Todd. as is known, attributed to the two diseases a pathological connexion, and styled the contracted kidney the gouty kidney.

I come, lastly, to speak of the co-existence of albuminuria and cardiac disease. There has been considerable discussion as to whether the pathological conditions of the kidney give rise to valvular lesions and enlargement of the heart, or *vice versâ*. I have been led to think that the two are not associated sufficiently often to show any pathological connexion between them, or, at all events, that disease of the heart very rarely, if ever, stands in a causative relation to the pathological conditions of the kidneys included under the name of albuminuria. I would premise that it is not enough for some deviation from the size of the heart to exist, or some abnormal condition of the valves, to show a causative influence. Simple hypertrophy, if not excessive, alone does not occasion notable trouble; so valvular lesions may be innocuous. I think it should be assumed that, for cardiac disease to exist sufficiently to be suspected of giving rise to disease of the kidneys, there must be sufficient dilatation, either with or without valvular lesions, weakening the organ, more especially the right cavities, and thus inducing more or less general congestion. Statistics will, I believe, show that in grave cases of diseases of the heart, albuminuria rarely exists save as an incidental symptom, not as representing the pathological conditions of the kidney to which the name of albuminuria is applied. This opinion is based on an examination of a large number of cases while I was engaged in preparing my work on diseases of the heart. Again, cases of albuminuria afford the signs of important cardiac disease during life, and the appearances after death in a small proportion of cases.

Of twenty recorded hospital cases, which were not fatal under my observation, there were no signs of disease of the heart in seventeen; signs of valvular lesions, with more or less enlargement, were present in only three cases. With reference to the adequateness of physical signs in determining the existence of disease of the heart, we may certainly assume that they suffice to show with positiveness disease of importance enough to be suspected of inducing disease of the kidney.

Of fourteen hospital cases proving fatal, and the autopsies recorded, there was no cardiac disease in seven; in two cases recent pericarditis existed; and in five cases there were valvular lesions with more or less enlargement. It is worthy of note that in four of these five cases the valvular lesions were aortic, for it is well known that aortic lesions are less apt than mitral to lead to dilatation of the right cavities.

Of ten cases in private practice, not fatal, there were no signs of valvular lesions or enlargement in nine. In one case there existed mitral lesions and hypertrophy. In two cases there was recent pericarditis.

Assuming that cardiac disease, in order to give rise to disease of the kidneys, must have advanced far enough to occasion marked disturbance of the circulation, these facts furnish very little ground for supposing any causative connexion.

In the one hundred cases of albuminuria reported by Bright, cardiac disease co-existed in forty-nine. But of these forty-nine, only eight had valvular lesions with enlargement. The remainder had simple hypertrophy, or the heart was considered somewhat large, or valvular lesions existed without enlargement. It seems to me that, with reference to the suspicion of causation derived from pre-existing cardiac disease, all the cases, save eight, are to be excluded.

In the thirty cases reported to this Academy by Prof. Clark, cardiac disease existed in only three. In one of these three cases, the lesions were those of old pericarditis with enlargement, and in another of these cases there was simple hypertrophy.

In conclusion, Mr. President, incomplete as is our present knowledge of the subject under discussion, it is interesting to consider how much light has been shed on morbid phenomena by the discovery of Bright. Prior to the researches following his discovery, in cases of general dropsy dependent on albuminuria, physicians were content to say that there was either excess of exhalation or deficiency of absorption; the significance of the vomiting and purging now attributed to to the vicarious elimination of urea, was not understood; the sources of the intercurrent inflammations were unknown; the uræmic convulsions were attributed merely to cerebral irritation or to inflammation of the brain; and sudden fatal coma was considered as due to simple apoplexy. So, as we may hope, equally important discoveries are hereafter to be made, opening new fields of research, and illuminating portions of the great field of pathology which are now shrouded in darkness.

AMPUTATION OF THE ANKLE-JOINT.

By E. P. BENNET, M.D.

DANBURY, CONN.

The want of success which often attends this operation, is dependent in most cases upon an accumulation of fluids in the cup-like flap which prevents union by the first intention, and often leads to ulceration, prolonging the cure and producing a bad stump. All this trouble can be remedied by doing exactly what authors are particular in saying you must not do, that is, by making an incision through the flap at its posterior part, and thus obtaining proper drainage. I usually put into this incision a dossil of lint to prevent its closing up, and in this way obtain a speedy cure and an excellent stump. Performed in this manner, I think it preferable to Pirogoff's operation, especially in military surgery, for in the latter operation the cure is not so rapid or so certain, as the bones may not unite kindly, and may become carious or necrosed. The slight difference in length can be easily remedied by a thicker sole of the shoe.

DANBURY, CONN., Nov. 21, 1862.

Reports of Hospitals.

A CASE OF GANGRENE OF THE THROAT,

OCCURRING IN THE HOSPITAL AT FORT HAMILTON, N. Y.

By W. H. STUDLEY, M.D.

ACTING ASSISTANT SURGEON, U.S.A.

In a recent issue of the Medical Times an interesting article appears, describing a peculiar disease which the writer terms "*Gangrene of the Throat.*" Within a short time, a case of sickness, resulting in death, occurred in hospital at this post, bearing in some respects so close a resemblance, that it may not be altogether unprofitable to give it publicity.

Charles Perkins, aged 21, born in New York state, and enlisted as a soldier since August last, appeared on the sick list towards the last of October. His symptoms were those of common remittent fever, and he was treated in the usual manner for such. The treatment met with no favorable response. The disease soon assumed the form, more or less, of continued fever, and at last put on the more striking characteristics of genuine typhus: dry, blackish-brown tongue, teeth covered with sordes, persistent stupor, inability or disinclination to answer questions, more or less confined bowels, absence of tympanitis, and the characteristic dark spots of the skin. In this stage of the disease, he was put upon quinine, brandy, and chlorate of potash, and supported with beef-tea, egg-nog, etc. Within the short space of four or five days, all the worst symptoms disappeared. The patient began to call for food, conversed freely, and even, though unadvisedly, sat up. He continued to improve for a few days, when one morning he complained of a little soreness of the throat. It being damp weather, and the windows having been left open by the attendants longer than they should have been, the inference was that it was the effect of exposure to the cold damp air. Slight fever and considerable debility now supervened, with loss of appetite. He kept his bed, and gave evidence of a general relapse. But little was done for his throat for the reason that it was lightly complained of, but for the more serious constitutional symptoms the former supporting treatment was again resorted to. Within three days of his first complaint of his throat, I found him in my morning visitation breathing very laboriously, like one with croup, every inspiration giving a loud noise similar to that produced in hooping-cough paroxysm, and hawking up freely a stringy, viscid mucus. His pulse was now considerably quicker and fuller than natural, and he wore an anxious countenance. I got him up in a chair, and with a tongue spatula explored the fauces, found the left tonsil a little swollen, and just anterior to and below it, a bulging, semi-transparent bag. I introduced a sharp pointed bistoury, and made several cuts which were followed by slight bleeding. I then passed my finger down the throat, found the epiglottis very œdematous, as also the parts above the vocal chords. I then, for want of a better instrument, took a common gum lancet, and first passing the index finger of my right hand down to and over the epiglottis, with my left passed the lancet down flatwise as far as I could, and then turning it and flexing the handle, was enabled to reach the diseased parts, in which I made about six or eight gashes. Pretty free bleeding followed, with some vomiting produced by the gagging operation, and in a few minutes the patient expressed himself greatly relieved.

I then ordered the following:—R Ammoniæ muriatis ʒ ss.; potassæ chloratis ʒ ss.; acaciæ gum. ʒ j.; Syrupis simplicis ʒ iv.; aquæ ʒ xij.; Misce.

S. One tablespoonful every half hour.

I visited him during the evening of the same day and found him quite comfortable, so far as his breathing was concerned, though a hurried pulse, quick breathing, and a disposition to toss about in bed, indicated mischief somewhere. Next morning, about four o'clock, he expired—whether from exhaustion or suffocation I was unable to determine, from the imperfect account given by the attendants.

Autopsy thirty hours after death. None of the abdominal or thoracic viscera gave evidence of lesion. There was none in the œsophagus or trachea. But on opening the larynx, the parts on its left, beginning with the ventricle and including it, embracing the whole arytæno-epiglottidean fold, the left side and top of the epiglottis, and a narrow strip of mucous membrane, extending up to the left tonsil, presented a blackish green swollen mass. Cutting into it in several places, revealed this discoloration to the depth of one-fourth to one-third of an inch. There appeared no ulceration, but on the contrary, the mucous membrane seemed entire, with the exception of the cuts made by the gum-lancet.

With this description of the case, I leave it for each one to name the disease according to his fancy.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

ADJOURNED MEETING, July 9, 1862.

DR. JAMES ANDERSON, PRESIDENT, IN THE CHAIR.

DISCUSSION OF DR. BYRNE'S PAPER ON PELVIC HÆMATOCELE.

(DR. BYRNE'S Remarks, Concluded from page 303.)

As regards retroversion of the uterus, the remarks of Dr. Barker being, in substance, those which may be found in my paper, I need only repeat what has there been stated, viz. that "Retroversion *at first sight* might be mistaken for hæmatocele, or *vice versâ*, but the position, or rather direction, of the os and cervix, and other features diagnostic of this displacement, render it hardly possible to entertain doubts on this point after mature reflection: should some peculiarities be present, however, tending to excite suspicions one way or other, the introduction of Simpson's sound will be the most unequivocal means of arriving at a correct inference."

So also in reference to dislocated ovarian cysts and fibrous tumors—more particularly the latter, which, contrary to the statement of Dr. Barker, might, I imagine, under certain circumstances, be very readily mistaken for hæmatocele. Very clever diagnosticians *have* made such mistakes, and therefore to ignore this difficulty would be acting contrary to facts and experience, and unsafe in practice. In the case related by Dr. Barker as having occurred in Bellevue Hospital, there is one statement which requires

some explanation, and that is where he says, "*In introducing my finger into the rectum, I could lift up the tumor, and carry it forward without any great appearance of distress, which would not be the case in pelvic cellulitis.*" Now of hæmatocele I would remark, that if there be one symptom more characteristic than another of this particular kind of tumor, it is *its total immobility;* because, even when the hæmorrhage takes place *into* the recto-uterine *cul de sac*, there has never, I think, been an instance in which a *firm* tumor was recognised until the peritonæal inflammation had isolated the effused mass by forming an upper boundary for the cyst, when the swelling is found to be firmly fixed to the adjacent parts; and, on the other hand, when the blood happens to be outside or under the serous membrane, the tumor is immediately formed, and equally immovable. I shall therefore look forward with some interest to Dr. Barker's promised report of that case.

In the other case related by Dr. Barker as having occurred at Astoria, it has been stated that "*there were symptoms of hæmatocele.*" The patient, it appears, "was taken, after using an injection of cold water, with intense peritonæal pain, tympanitis, a sudden but not very profuse discharge of blood, and excessive collapse." There was great difficulty in passing water and evacuating the bowels, and a tumor was formed in the pelvic cavity—how long after it is not stated—"and after the lapse of some months a discharge of pus took place." Pelvic cellulitis, though a rare disease when unassociated with the puerperal state, yet does sometimes occur, or at least a condition of things very similar; and just such a case as Dr. Barker describes, I have met with in a married lady who had never been pregnant. This patient had been troubled with leucorrhœa, for which syringing with cold water was prescribed. While in the act of carrying out this part of the treatment, she was seized with symptoms precisely similar to those noticed in Dr. Barker's case, and after nine or ten weeks was relieved by a copious discharge of pus through the rectum. Now I never should suspect such cases to be examples of hæmatocele, and I cannot, therefore, view the diagnosis in the one related by Dr. Barker as correct.

As to the relative frequency of the two admitted varieties of hæmatocele, it has been asserted that the intra-peritonæal is by far the more frequent, even "as three to one." I cannot possibly understand by what process of reasoning gentlemen manage to arrive at such a conclusion, and, though ever since the appearance of the memoirs of Bernutz, one writer has followed another in reiterating this opinion, I must here protest against the acceptance of such inferences, however stereotyped, for I think they are both rash and illogical, and calculated to lead us astray in our pursuit of the correct nature of this disease. The fallacy of basing such statements on the post-mortem statistics of hæmatocele is too apparent to need more than a simple denial of the right to be guided by this kind of evidence; because, in the first place, intra-peritonæal hæmorrhages, if at all excessive, must necessarily be fatal in the great majority of instances, and, secondly, in cases where the mischievous and unjustifiable tampering with human life, usually called "*the expectant treatment*," has been adopted, as for instance in Case 32, and others related by Voisin, I cannot see how it is possible, where the whole pelvic organs are matted together by adhesions, to arrive at any degree of certainty as to the origin and exact relative location of the effused blood. Since my paper was submitted to this Academy, I have continued to investigate the various points relating to the pathology and diagnosis of these affections, and in the chapter commencing at page 37 of my "Researches," lately published, I have endeavored to present my views in as plain and condensed a manner as possible; consequently, for the sake of brevity, I will crave your attention while I read what has been there stated. . . . . .

"One of the arguments adduced by those who question the existence of large hæmatomas within the cellular tissue, and founded, no doubt, upon ideas such as that promulgated by M. Lefort,* is, that if not impossible, it is at least very improbable, that the peritonæum could be so raised up from the uterus as to form the upper boundary of the cyst. It is true, though the post-uterine cellular tissue near the cervix and upwards to the extent of an inch, and sometimes more, is loose and abundant, it gradually becomes less so from this point, more dense, and, towards the fundus, semi-fibrous. It must also be admitted, and I have satisfied myself as to the fact, that, in this latter situation, the serous tunic cannot be separated, *with any degree of facility*, from the uterine stroma, unless the parts have first been subjected to maceration.

"However, those who initiate their arguments from a mere anatomical point of view, and without making due allowance for the relative as well as the structural changes which diseased action may produce in these and other parts, ought to bear in mind that it is very probable these tissues often undergo as complete maceration when subjected to certain pathological influences in the living body (as for instance in pelvic cellulitis, or that condition which Pirogoff would term acute purulent œdema), as they do when removed from the dead subject and submitted to the action of fluids with this special aim.

"Indeed, Professor Simpson, who treats this whole subject in his usual lucid and eminently practical style, has conclusively settled this question by the following facts: A patient 'was sent from a great distance to Edinburgh, in consequence of a pelvic tumor having suddenly appeared. Fatal inflammation was set up by the journey. On dissection I found the reflection of the peritonæum between the uterus and rectum raised up, and a large mass of broken coagula of blood formed the tumor, having been extravasated behind the peritonæum, forming the posterior covering of the broad ligament, and, as it accumulated, having separated and pushed before it that portion of peritonæum and utero-rectal fold of this membrane.' Those who will take the trouble to carefully analyse the record of cases thus far available, cannot fail to be impressed with two very important facts noticeable in most of them, namely (first), the absence of symptoms sufficiently indicative of so grave an accident as extensive hæmorrhage into the peritonæal sac, and (second), *the lateral position of the tumor* above the brim of the pelvis, and frequently also in the vagina.

"These two peculiarities alone, or, in fact, either one, ought (I imagine) to make any diagnostician, however expert, hesitate in pronouncing such tumors intra-peritonæal: because there is surely nothing in the normal arrangement of the pelvic viscera, nor is there any pathological law regulating the disposition of fibrinous adhesions following acute peritonitis which would favor, so often, this lateral isolation of the blood. Besides, is it at all probable that resorption of such large masses of blood, or, indeed, recovery through any means, would result so frequently, if we admit that the serous membrane is often the seat of such violence? Consequently, that *encysted bloody tumors within the peritonæal cul de sac are extremely rare*, and that *those occupying the structures external to that membrane constitute the great majority*,—say 75 or 80 per cent. of the whole,—would seem to be about the correct conclusion to arrive at, regarding the relative frequency of intra and sub-peritonæal hæmatocele.

"These opinions, thus confidently expressed, and no less positively entertained for some time, have lately induced me to pursue my investigations further, with a view, if possible, of being able to correct certain misconceptions which exist respecting the differential diagnosis of these '*intra-pelvian sanguineous cysts*.'—(Tilt.)

"It has been repeatedly asserted by many who might be considered capable of offering an opinion on these points, that in sub-peritonæal hæmatocele, the tumor in

* Voisin, page 215.

the vagina will be lateral, and the uterus displaced towards the opposite side; and that a large central swelling would, on the other hand, plainly indicate that it must be intra-peritonæal. But the following experiment, which I have made, and repeated over and over again with like results, will demonstrate, pretty conclusively, that *such diagnostic signs are entirely unreliable.*

"A small opening was made into the superior fold of the broad ligament on the left side, and at a little distance from the inferior border of the ovary, into which was inserted the tube of a syringe such as is used for anatomical injections; the parts having been secured by ligature, water was now thrown into the cellular tissue, which it entered with facility, separating the two layers of the peritonæum and spreading them out in the form of a tent. At that juncture the water passed with much more ease than elsewhere, under the peritonæal covering of the iliac fossa, raising the same off the muscle, but quickly and with but little force, filled up the whole recto-vaginal septum and opposite (right) side as high up as the brim. A vaginal examination was now made, when the finger came in contact with a large *central (retro-uterine) swelling.* The injection being next continued, the left iliac fossa rapidly became very much distended, and that of the opposite side also swollen, but to a more limited extent. The post uterine connective tissue, as high up as the junction of the cervix with the fundus at least, offered no resistance to the passage of the liquid. The lessons which this and similar experiments teach are, first, that although the lateral position of the tumor will always denote its sub-peritonæal character, yet, the fact of its being central and occupying the whole posterior part of the vagina does not, by any means, prove the contrary; and, secondly, that the position, size, or shape of the swelling—though, *if infra-peritonæal, always central* both above the brim as well as in the vagina—possesses but little, if any, value as a guide to differential diagnosis.

"There are, among others, TWO INTERESTING AND HIGHLY INSTRUCTIVE FACTS observable in connexion with the occurrence of hæmatocele: *first,* that, of all the subjects in which this peculiar disease has yet been noticed, and whose cases have been properly authenticated, married women, and especially those who have been pregnant or borne children, constitute at least four-fifths; and, *secondly,* that unmarried females, or those whose sexual organs have not been subjected to excitement, or physiological changes other than we know to attend the menstrual function, amount to a fractional portion, only, of the whole. Without dwelling on the importance of these facts as corroborative of views already set forth, it may not be amiss to notice a few reflections naturally occurring in this connexion.

"Though, after parturition, the uterine sinuses contract, and vessels imbedded in the dense stroma of that organ are supposed to resume their original size and condition, yet it by no means follows that the utero-ovarian 'thin-walled veins *without valves*'* possessed with little or no contractile power, and surrounded by loose cellular tissue, should undergo a similar change. Indeed it would seem more probable that *permanent dilatation of these veins,* more or less, *is a necessary consequence of pregnancy;* and if the ovarian vessels, in that condition, bear any analogy to those in the lower extremities, which never resume their original size, nor disappear but by obliteration, it is evident we must look here for the only true predisposing cause in all cases of sub-peritonæal hæmatocele, and which, as I before intimated, may safely be put down at 80 per cent. of the whole."

Dr. Barker, referring to the surgical treatment of hæmatocele says, "*he objects theoretically to my method—that is, puncture through the rectum, and for this reason, that the anterior and posterior walls of the rectum are always in contact, and thus the evacuation will be very incomplete,*" while "*the cavity of the vagina is much more elastic, larger, and more complete, and the evacuation through this canal will be more perfect.*" In reply, I have merely to remark, that, as the premises on which these objections are based are not strictly correct, I am unable to accept this explanation of the advantages which the vagina possesses over the rectum; because, "*the most depending part of the tumor*" *is not in contact with the posterior walls of the rectum.* Moreover, the very elasticity of the vaginal walls which he looks upon as desirable, together with the greater thickness of the intervening tissues, offers, to my mind, strong objections to choosing it as the more suitable place for puncture. As to the selection of a proper instrument, agreeing as I do with the views of Bernutz, in his late excellent treatise on the diseases of women, that "*to open largely such tumors, and to forcibly remove the clotted blood, is a most outrageous practice,*" I should always select a large-sized curved trocar. It is quite customary for writers to recommend that all palliative means should be exhausted before resorting to surgical interference in these cases; and not until the patient's life is in great danger, and rupture of the cyst and fatal extravasation into the cavity of the peritoneum become imminent, should we have recourse to such a proceeding.

I hardly think it necessary to occupy your time by adducing numerous facts which the recorded cases of Læmatocele supply, in refutation of such a pernicious doctrine: because I feel confident that the practice thus indicated, will be found to be opposed both to science and humanity. If we extract from cases which have terminated fatally after operative proceedings, those in which such interference had been *too long delayed,* and others where *undue violence* had been done to the parts *by the use of an improper instrument,* I believe we shall find but little left to deter us from resorting to timely and judicious surgical interference.

The Academy was then adjourned.

* Kölliker's Manual of Human Histology, page 267. Syd. Ed.

FOREIGN CORRESPONDENCE.

LETTER XVII.

By PROF. CHARLES A. LEE.

LUNATIC ASYLUMS.

447 Louvre Hotel,
Paris, August 30, 1862.

In my last letter I gave some account of the colony of Fitz-James and the lunatic asylum connected with it, at Clermont (Oise), conducted by Dr. Labitte. I was accompanied in my visit, as I have also been to several other asylums, by Dr. Brown, of the Bloomingdale Insane Asylum, near New York, who is inspecting similar establishments in Europe, at the request of the Trustees of the Sheppard Asylum at Baltimore, Md. This institution was founded by the late Moses Sheppard, a wealthy merchant of the Society of Friends, who, several years before his death, conceived the project of testing the curability of unfavorable cases of insanity, by a more liberal expenditure of money than the friends of most asylums would reasonably permit. To this end Mr. Sheppard, having no relatives, left his whole fortune, amounting to six hundred thousand dollars, to found and maintain an experimental institution for one hundred patients. After several years of careful consideration, the Trustees of the Sheppard Asylum have commenced the construction of their building, on a plan submitted by Dr. Brown, who now studies the organization and management of European asylums, to report whatever may serve to carry out the humane purposes of the benevolent founder of this unique institution. Dr. Brown, after having visited the most celebrated asylums in Great Britain, Holland, Germany, Switzerland, and France, expresses regret at having found, thus far, but inconsiderable rewards for the commendable liberality of the Board he represents.

I have also visited the most noted institutions of this kind in England and France, and, with the exception of the agricultural colony at Clermont, I have seen nothing deserving of special commendation which is not also found in our own country. Indeed, I think, as a general rule, we are considerably in advance of the old world in the successful treatment of the insane, and our statistics will

show a larger percentage of cures than can be found in the large majority of European asylums. And it is very natural that it should be so. Americans are the most practical people in the world; they are not easily led to adopt novelties merely because they are novelties, but which have nothing else to recommend them; but they speedily introduce every improvement which is founded in reason and common sense, and which promises any practical benefits, wherever it may have originated. The unreasonable and obstinate prejudice which exists in Great Britain, against adopting anything new from foreign countries, fortunately does not exist among us, and hence we are never found lagging far behind in the race of improvement, and the march of civilization. Hence, Prof. Ackland, M.D., of Oxford, who accompanied the Prince of Wales in his recent visit to the United States, expressed surprise that American physicians should visit Europe to examine lunatic asylums, for they would find better ones at home, as at Philadelphia, under the charge of Dr. Kirkbride (and, I may also add, at Bloomingdale, under the charge of Dr. Brown), than can be found in Europe. Such I know to be the opinion of the most enlightened physicians of England, Germany, and France, who have made themselves acquainted, by personal observation, with such institutions on both sides of the Atlantic.

In England I visited, among others, the great establishments of Hanwell, Colney Hatch, Bethlehem Hospital, etc., also the private asylums of Dr. Conolly and others, but I saw nothing which is not well known and carried out in the United States. The Commissioners of Lunacy have, no doubt, effected many reforms, and corrected many evils, though they have not always sufficient power to carry out the improvements which they recommend; still public opinion, sooner or later, corrects the evil, and the public reap the benefit of their wise and practical suggestions. Such Boards are needed in our own country, and it is to be hoped that it will not be long before all our states will adopt a similar measure. There will, necessarily, be more or less clashing and friction between such boards and the trustees and managers of insane asylums, but this is incident to all supervisory bodies, and must be expected. Still, the evident benefits and improvements which they effect is a sufficient answer to the objections sometimes brought against them.

In company with Dr. Hills, of the Ohio State Lunatic Asylum, I visited the great lunatic establishment at Charenton, which is designed by the French government as the model institution of the kind in France. It is organized on a grand scale, more than six hundred thousand dollars having been recently expended in its reconstruction. It is situated on an elevated plateau, or rather terraces, protected from northerly winds by the parc of Vincennes, and commands an extensive prospect of the valley of the Marne and the Seine. The numerous sections, all furnished with galleries, courts, lawns, etc., allow of more classifications than can be found in any of our asylums. There are fountains in all the courts, and water is abundantly furnished for baths, etc., to every part of the establishment. The courts and buildings, also, are all lighted with gas, made on the premises, which is introduced into all the rooms and dormitories.

All of the rooms fronting the river command a very extensive and beautiful prospect, and the pay patients are each furnished with a separate apartment, and a place for the attendant to sleep. Both male and female wards are connected with extensive gardens and forests, where they walk a considerable part of every day. There is a farm, also, connected with the establishment, where the patients are "invited to labor," some of whom accept the invitation. But I could not learn that many of the patients were engaged either in gardening, horticulture, or agriculture; for there is not that system of organized labor which is so successfully carried out at the "colony" at Clermont. Many of the females are employed in needle work, embroidery, etc.; and there is a professor of music attached to the institution, who gives daily lessons in music; there is also a library, lecture-room, billiard-room, etc., provided for their recreation and amusement. Some are taken out in carriages to ride, music and dancing parties are held twice a week in the grand saloon, and as many of the customs of the world and French society are introduced as is thought useful or expedient. The establishment is placed under the authority of the Minister of the Interior, and is presided over by a director appointed by the Minister. There is also a "Consultive Commission," whose members are taken from the "Council of State," the "Court of Cassation," and the "Court of Accounts," appointed also by the Minister, and whose services are gratuitous.

The annual allowance for the establishment is proposed by the director, with the advice of the consultive commission, and approved by the Minister, to whom an annual report is made. The financial affairs come under the cognisance of the "Court of Accounts." Dr. Cabmeil is the Physician-in-chief, aided by several resident assistants. A chaplain also resides in the institution, who daily celebrates mass in the chapel. All the religious services are celebrated with the usual pomp of the catholic church, accompanied by the organ.

The dormitories are spacious, well lighted, and airy, and the passages warmed by iron pipes under the floor; but it struck me, as well as Dr. Hills, that there was generally a lack of proper ventilation. The day was, however, very hot and sultry, and no air stirring.

Patients are received here as boarders, and gratuitously on an order from the Minister, who has a certain number of *bourses* at his disposal, to be applied for a limited time in favor of persons having a claim on the government. There are three classes of boarders: the first, those who pay 1425 f., and upwards; the second, 1125 f.; and the third, 828 f., including washing. Certificates signed by medical men, not more than a fortnight before admission, are to be presented on behalf of lunatics previous to their admission, and certain formalities have to be complied with. Having a general ticket of admission to all the hospitals of France from the Minister of the Interior, we were freely shown through every part of the establishment, which, we have no doubt, is admirably managed. The ordinary means of physical restraints are here employed to a considerable extent, and are, in my judgment, preferable to padded rooms and complete isolation, as practised in the British institutions, as society seems indispensable to recovery. The establishment now contains about nine hundred patients.

The great Hospice *Salpetrière* is both an alms-house and a hospital, chiefly for incurable, epileptic, or lunatic female patients, and patients advanced in age. It contains 5204 beds, of which 2917 only are occupied by real patients. It is an immense establishment, consisting of forty-five distinct buildings, extending 1680 feet in length. The hospital receives, first, the *reposantes*, women who have been in its service thirty years, and who are upwards of sixty; second, indigent old women, upwards of ninety, afflicted with incurable maladies; third, insane and epileptic females. The lunatics, of whom three-fourths are considered dangerous, are kept in separate infirmaries and treated with the greatest care. I saw several hundred of them sitting at the supper-table, each with an ample allowance of wine, and a plate of ripe plums and apricots, besides bread, etc. It was a delightful sight to see the cheerfulness of the old ladies, and hear their merry chat as they partook of their evening meal.

The *Bicêtre* is situated on lofty ground, differing in this respect from the Salpetrière, and enjoys a more salubrious air than most of the Parisian hospitals. It is an asylum for indigent old men and male lunatics, and receives about two thousand patients. It presents a square of nine hundred feet on each side, and contains three courts. The indigent and infirm old men occupy the greater part of the building. They have no private rooms, but there are large rooms with workshops and dormitories, as also several gar-

dens and court-yards for exercise. They are obliged to work three hours a day at their respective trades, or other occupations, and receive in return a share of the profits; the rest goes towards defraying the expenses of the establishment. The daily allowance to the indigent is a portion of soup, a pound and a quarter of bread, four ounces of meat for dinner, vegetables or cheese at night, and a quarter of a pint of wine. The average daily cost of each is nine sous (cents), and the total annual expense about nine hundred thousand francs. The number of lunatics, idiots, and epileptics is about nine hundred, who have the same allowance as paupers, except a larger allowance of bread. Physical restraint, by strait jackets, etc., is very common. Generally, however, the treatment is very mild, and daily employment is given on a model farm and bleaching-ground, where there are also sties for breeding swine of superior breeds. This farm not only supplies the establishment, but produces sufficient to partly supply the other Parisian hospitals. There are various kinds of schools in the establishment for lunatics of all ages. Instrumental concerts are often given by the patients. Voisin, Delasiuave, and Moreau are the physicians having charge of the lunatics.

There are also numerous private lunatic asylums in the neighborhood of Paris, the most celebrated being that founded by Esquirol at Ivry, Dr. Marcet, of the Bicêtre, being resident physician; the *Maison de Santé du Chateau, Sainte-James, près Paris*, and the *Maison de Santé* of Dr. Blanche, at Passy. The establishment of *Sainte-James* is near the Bois de Boulogne, and is carried on by Dr. Casimer Pinel, the nephew of the celebrated Pinel. It is a very extensive old chateau, built in the reign of Louis XV., and in the style of that age, and was occupied during the reign of Louis Philippe by M. Thiers, his minister, the distinguished historian. The grounds, which occupy several acres, are handsomely ornamented with flowers, shrubs, and trees, artificial lawns, grottoes, and bodies of water, etc. There is a large and productive kitchen-garden, and a variety of fruit trees. The walks are pleasant and well shaded, and there is a commodious billiard-room excavated from a solid rock. There are several buildings appropriated to the patients who belong to the wealthier classes, and pay from seven to twelve hundred dollars annually. Nearly all have their own servants. The two sexes occupy distinct premises. The attendant sometimes occupies the same room with the patient, but more frequently an adjoining one, separated by lattice-work. The fire and lights are also placed in the servant's room, and are inaccessible. The main building seemed to me very poorly adapted to the purpose of an insane asylum, many of the rooms being small, and not being well lighted or ventilated. The Doctor is a member of the Legion of Honor, and an author of distinction. He very politely gave me several of his works on insanity. He is a great advocate for the use of prolonged baths, and long continued dripping of cold water on the head in certain cases of insanity, and has written a treatise on the subject. He has also written a work on the "Isolation of the Insane," which he deems advisable in a large majority of cases; not at home, but in a public or private asylum, and indispensable for the poorer classes. He insists on the great importance of resorting to it at as early a period as possible, and believes that the incurable cases originate from a neglect of isolation in the beginning of the disease.

The Doctor resorts to the usual modes of physical restraint in all violent cases, and where the patients are inclined to injure themselves or others. He is about sixty, of affable and agreeable manners, and enthusiastic in his specialty. He numbers about forty patients. The private institution of Dr. Blanche, at Passy, is also located in an old chateau of the age of Louis XV., built by Prince Carignan, and occupied by his descendants for many generations. During the French Revolution it was occupied by the Princess Lamballe, who was seized in this very house and dragged before the Revolutionary Tribunal, to be brutally murdered by the mob before she could reach the guillotine. Extensive additions have, however, been made by Dr. Blanche, so that it is now tolerably well adapted to the purposes of such an establishment. The premises occupy several acres, which are well laid out in walks, pastures, lawns, etc., and planted with ornamental trees and shrubbery. Each patient has his own attendant and a separate apartment. Each patient pays, on an average, about one thousand dollars annually, some more, some less. Physical restraints are freely used, as preferable to padded rooms. Dr. Blanche does not believe in isolation, nor in prolonged baths, nor water drippings on the head. There may, possibly, exist some rivalry between him and Dr. Pinel, for they are rather antagonistic on many points. The Doctor spoke highly of Arnot's water-bed for paralysed cases. To the question, why general palsy was more frequent than formerly, Dr. Blanche replied that people lived faster than they used to, used up their nervous agency sooner than they formerly did, which I conceive is the true explanation. He said that domestic unhappiness was a very frequent cause of insanity; that there were few happy marriages in France; that those in Paris could easily be counted; that most of those who lived together were not man and wife, etc. I hope he is mistaken.

Dr. Blanche showed Dr. Brown and myself every part of his establishment, and explained fully his views in regard to the management of the insane. He has about eighty patients, and his terms, as will be seen, are about the same as those of Dr. Pinel. This must suffice for the public and private lunatic asylums of France. The subject is far too vast to be treated satisfactorily within the limits I have allotted myself; but there are other topics, at least as interesting, which demand our notice, and which will receive attention in future communications.

American Medical Times.

SATURDAY, DECEMBER 6, 1862.

GARIBALDI'S WOUNDS.

The recent misadventure by which the life of the Italian patriot Garibaldi has been jeopardied, has gradually assumed a professional aspect of remarkable interest. No less than four nationalities have been represented in the consultation over his wounds. From the conflicting accounts which have been published, we glean the following facts:—

Garibaldi received a gunshot wound of the ankle at the battle which resulted in his capture. The ball opened the joint, fracturing the internal malleolus. The question of the presence of the ball in the wound divided the eminent Italian surgeons in attendance, the majority inclining to the opinion that it was present. No efforts were made to remove it, and the health of the patient soon became critical. They put forth the following opinion of the condition of the patient:—

"From the general course of the illness, and from all our foregoing observations, we think we may anticipate a favorable success, notwithstanding the degree of anchylosis which may manifest itself; but we are still of opinion that the wound is serious—1, because the important articulation of the foot with the leg is open, and the internal ankle is fractured; 2, because the presence of the bullet is not disproved; 3, on account of the arthritic disposition of the sufferer—all circumstances which might give rise to morbid complications of such a nature as to prolong and even to

aggravate the complaint. As to the cure, we deem it expedient to persevere in the treatment hitherto followed."

About this time an English Society sympathizing with the sufferer, determined to despatch a surgeon to ascertain exactly what was the condition of the wound, and relieve their suspense. Regardless of all professional etiquette, being invited neither by the patient nor his surgeons, the surgeon, a MR. PARTRIDGE, accepted the proffered mission (and a fee of $3000), and subsequently published the following statement:—

"The accident may be described, shortly, as a transverse compound fracture of the right internal malleolus (ankle bone), produced by a rifle shot, which, though it opened the joint by a small aperture, did not enter it nor lodge itself in any other part of the limb. The outer ankle bone remains uninjured, nor does the astragalus (the great pulley-like bone of the foot, which sustains the leg) appear to have been injured; the most careful examinations, made immediately after the accident and since, have led to the conclusion that no other bone except the tibia (or greater bone of the leg) was implicated in the injury. At first severe inflammation, swelling, and excessive pain, followed upon the infliction of the wound; but these were subdued by cold applications, cataplasms, leeches, and rest, so that now the ankle and surrounding parts present nearly their natural size and form, the foot being almost at a right angle with the leg; and otherwise in excellent position. The wound, the circumference of which (on its superficial aspect) is rather larger than that of half a franc, looks well, and discharges healthy matter, mingled with molecular fragments of exfoliating bone, which are rarely larger than grains of sand. The present unswollen state of the ankle and of the parts around it permits of an examination, which has confirmed the assurance given by other circumstances, that the bullet did not enter the joint, nor effect a lodgment elsewhere. * * * * My opinion is that (bearing in mind his habitually abstemious habits), if mental as well as bodily repose are steadily enforced, if the injured limb be kept at perfect rest, if the general health and strength be sustained by suitable nourishments (and, if need be, by stimulants), by well aired, well kept, and quiet rooms, and, lastly, by a continued supply of those comforts necessary to his present condition, the general will, with time (certainly some months) and care, have a good, useful foot, though the ankle-joint may become stiff, or, at the best, be only partially movable.

Bearing date of Spezzia, Oct. 31, is the following card, signed by PIROGOFF, we presume the distinguished Russian Surgeon:—

The examination of General Garibaldi's wounded foot has furnished the following results:—

1. The articulation of the foot is opened by the ball on the internal side.

2. The two malleoles, together with the internal portion of the articulation, are tumefied.

3. As far as we can judge by external exploration, the ball will be found towards the external part of the articulation, fixed in the bone.

4. The suppuration is sufficiently good, and not abundant.

5. The foot is slightly turned inwards.

6. The distance between the two malleoles is greater on the wounded side by one and a quarter to one and a half than on the uninjured side.

7. The exploration of the wound, either with the finger or with instruments, is only indispensable when the certainty is reached that the ball has become mobile, and has neared the surface; such exploration should be followed immediately by the extraction of the ball.

8. The general health of the patient is excellent.

9. The expectative method—*i.e.* patience—is the one and only method to be followed in the present moment. It must be changed when the quality of the pus, the detachment of splinters, or the formation of an abscess, prove the evident necessity of the extraction of the ball.

10. The method of dressing the wound by the attending surgeon leaves nothing to be desired.

11. It is indispensable that the patient be kept in a spacious and well aired chamber, and that he pass the winter in a warm and dry climate.

Finally, we have added to the consultation a representative of French surgery in the person of the eminent surgeon NELATON. He visited Italy by invitation of the patient. The report which he presented contains the following opinions:—

"I think that the ball lies within the wound, and that the probe strikes against it when introduced about one inch into the part. I must say that my impression, as to the state of the wound, was very favorable when the limb was freed from dressings. The patient is not in danger at present; the pulse is good, the skin cool, the appetite sufficient, sleep satisfactory, and the aspect of the patient excellent. As to treatment, I think that the opening should be gradually widened for some days towards the foreign body, by means of dilating substances. At the end of five or six days the wound will be large enough to admit of extraction with the ball-forceps. It is preferable to extract thus gradually than by immediate means, which, however, would be quite practicable. Summary measures of the latter kind would present some difficulties; they would give rise to much pain and fever. They are, moreover, not imperiously required, as the patient's general health is every day improving."

We have here a grave consultation over a case admitting of the most rigid inspection, composed of representatives of Italian, English, French, and Russian surgery. It is stated that at the last consultation there were no less than seventeen surgeons present. The practical points reviewed are of great interest to the American surgeon, and may be briefly summed up as follows:—Is the ball present or not, in an open gunshot wound which the probe can readily explore to its extreme limits? If present, is the ball to be removed at once, or by gradual means? Such is the question presented practically to the best surgeons of Europe and about which, there is a difference of opinion. The conclusion of the consultation reveals English surgery pitted in diagnosis against continental surgery. The weight of evidence, giving due prominence to the reputation of the consultants, is largely in favor of the presence of the ball in the wound. English surgery, never expert in diagnosis, will doubtless have to yield this point. It would be gratifying to know what was the method of examining the wound. The patient is said to have suffered great agony during the examination; from which it is proper to infer that no anæsthetic was administered, unless there were strong objections. This was a singular omission, in a case of so much doubt, of an aid which would have greatly facilitated the exploration! Finally, shall a ball, lodged in an open wound involving a joint, be removed forcibly when "quite practicable," or be allowed to escape by the process of suppuration? The consultants in this case decided to dilate the wound gradually, and allow the ball to escape. The argument in favor of this method is, that summary measures would give rise to pain and fever. An Italian writer, in criticising this decision, states very justly that the first precept in surgery, in such cases, is to extract the projectile, as its presence may lead to profuse suppuration or purulent absorption. It would certainly be

a novel feature in American surgery to allow a ball to remain in the ankle-joint when the removal was "quite practicable," and the only obstacle was the danger of giving pain.

THE WEEK.

We have already noticed the establishment of a Directory of hospitals by the Sanitary Commission. Through the efforts of the indefatigable Secretary, Mr. Olmsted, this Directory has already been brought into complete working order, and will prove one of the most important and useful branches of the service of the Commission. The following circular explains the nature of this Directory:—

The Sanitary Commission have established an office of information in regard to patients in the Hospitals of the District of Columbia, and of Frederick City, Maryland. By a reference to books, which are corrected daily, an answer can, under ordinary circumstances, be given by return mail to the following questions: 1st. Is —— - —— [giving name and regiment] at present in the hospitals of the District or of Frederick City? 2d. If so, what is his proper address? 3d. What is the name of the Surgeon or Chaplain of the hospital? 4th. If not in hospital at present, has he recently been in hospital? 5th. If so, did he die in hospital, and at what date? 6th. If recently discharged from hospital, was he discharged from service? 7th. If not, what were his orders on leaving? The Commission is prepared also to furnish more specific information as to the condition of any patient in the District hospitals, within twenty-four hours after a request to do so, from an officer of any of its corresponding societies. The office of the Directory will be open daily from 8 o'clock A.M. to 8 o'clock P.M., and accessible in urgent cases at any hour of the night. The number of patients in these hospitals is about 25,000. If found to be practicable, the duty here undertaken locally by the Commission will be extended to include all the general hospitals in the country.

A London medical contemporary sneeringly remarks that American army surgeons who attempt to gain a livelihood by practice, after peace is restored, will quickly be reduced to the condition of the Lancashire operatives. This remark has significance only to an English mind, which cannot conceive of a country where the honest, frugal, and industrious citizen never knows want. And yet it ought to be apparent, even to Englishmen, that a country capable of carrying on the most gigantic war of modern times, and at the same time of charitably relieving their starving countrymen by shiploads of food, cannot have a class of necessary paupers.

We desire to call the attention of the Surgeons in charge of military hospitals to the Diet Table for the General Hospitals, U. S. Army, which has been prepared by a commission appointed by the Surgeon-General. It is important that a uniform diet table should be adopted in all hospitals, but before any particular form is selected, that recommended by the Commission is submitted for trial.

Miss Nightingale.—We regret to learn that there is only the very slightest foundation for the report of Miss Nightingale's restoration to health. She is able to remove from one place of residence to another—a very few miles—once a year, but she is scarcely able to leave her bed in the intervals, and quite unable to struggle with the flood of correspondence and applications of all kinds which the report of her partial recovery has brought upon her.—*Brit. Med. Jour.*

Correspondence.

AN IMPOSTOR AMONG MEDICAL MEN.

[To the Editor of the American Medical Times.]

Sir:—I have just learned of a successful deception practised upon several gentlemen of the Profession in New York and Philadelphia, personally unknown to me, under the assumption of my name. As in these instances sums of money have, on various pretexts, been obtained, I beg that any one upon whom the imposter referred to may call, will do me the justice to procure his arrest.

Yours, etc.

Horatio R. Storer, M.D.

Boston, Nov. 27, 1862.

Army Medical Intelligence.

DIET TABLE FOR GENERAL HOSPITALS,

United States Army.

ARTICLES COMPOSING THE DIFFERENT DIETS FOR A DAY, AVOIRDUPOIS WEIGHT.

FULL DIET.

Meat	oz.	16
Bread	oz.	18
Potatoes	oz.	8
Other Vegetables	oz.	8
Rice, Hominy, or Indian Meal	oz.	1.60
Salt	gill.	0 16
Coffee	oz	0.80
Tea	oz.	0 12
Sugar	oz.	2 40
Milk	oz.	8
Butter	oz.	1
Flour	oz.	0 25
Molasses	gill.	0 32
Vinegar	gill.	0.32
Tuesday, *in lieu of Fresh Meat:*		
Pork	oz.	8
Beans	gill.	0 64

HALF DIET.

Meat	oz.	8
Bread	oz.	16
Potatoes	oz.	6
Other Vegetables	oz.	6
Rice, Hominy, or Indian Meal	oz	1.60
Salt	gill.	0 16
Coffee	oz.	0.80
Tea	oz.	0.12
Sugar	oz.	2 40
Milk	oz.	8
Butter	oz.	1
Flour	oz.	0 25
Molasses	gill.	0.32
Vinegar	gill.	0.32

CHICKEN DIET.

Fowl	oz.	12
Bread	oz.	18
Salt	gill.	0.16
Tea	oz.	0 24
Sugar	oz	2.40
Milk	oz	8
Butter	oz.	1

LOW DIET.

Meat	oz.	8
Bread	oz	14
Salt	gill.	0.16
Tea	oz.	0.24
Sugar	oz.	2 40
Milk	oz.	8
Butter	oz.	1
Rice, Farina, Corn Starch, or Bread, made into Pudding	oz.	2

MILK DIET.

Bread	oz.	14
Rice	oz	2
Milk	pt.	3
Sugar	oz.	1

BEEF-TEA DIET.

Beef (without bone)	oz.	8
Bread	oz.	12
Salt	gill.	0.32
Tea	oz.	0.24
Sugar	oz.	2
Milk	oz.	4

EXTRA DIETS AND DRINKS.

Beef Steak.
" Essence.
" Extract.
Mutton Chop.
" Broth.
Veal Cutlet.
Ham, broiled.
Poultry.
Game.
Eggs.
Fish.
Oysters, raw.
" stewed.
Clam Soup.
Vegetables (special).
Milk.
Sugar, white.
Sugar, brown.
Barley.
Cracked Wheat.
Gruel, Corn meal.
" Oat Meal.
Farina.
Corn Starch
Tapioca.
Crackers.
Toast.
Chocolate.
Cocoa.
Blanc Mange.
Wine Jelly.
Custard.
Oranges.
Lemons.
Fruits.
Ice.
Barley-water.
Rice water.
Jelly-water.
Lemonade.
Wine Whey.
Brandy.
Whiskey.
Wine, Sherry.
"
Porter.
Ale.
Cider.
Milk Punch.

FULL DIET.

SUNDAY.

Breakfast.	Coffee	pt. 1
	Bread	oz. 6
	Butter	oz. ½
	Hominy, boiled	oz. 2
	Molasses	gill. 0.32
Dinner.	Roast Beef	oz. 16
	Potatoes	oz. 8
	Other Vegetables	oz. 8
	Bread	oz. 6
	Rice Pudding	
Tea.	Tea	pt. 1
	Bread or Crackers	oz. 6
	Cheese	oz. 3

MONDAY.

Breakfast.	Coffee	pt 1
	Bread	oz. 6
	Butter	oz. ½
	Cold Meat	oz. 4
Dinner.	Beef Soup	pt. 1¼
	" " Meat	oz. 12
	Bread	oz. 6
	Potatoes	oz. 8
	Other Vegetables	oz. 8
Tea.	Tea	pt 1
	Bread	oz 6
	Butter	oz ½

TUESDAY.

Breakfast.	Coffee	pt. 1
	Bread	oz. 6
	Butter	oz. ½
	Meat Hash, with Vegetables	oz. 8
Dinner.	Pork } Baked	oz. 8
	Beans } or in Soup	gill. 0.64
	Potatoes	oz. 8
	Other Vegetables	oz. 8
	Bread	oz. 6
	Indian Pudding	
Tea.	Tea	pt. 1
	Bread	oz. 6
	Butter	oz. ½
	Fruit, stewed	oz. 4

WEDNESDAY.

Breakfast.	Coffee	pt. 1
	Bread	oz. 6
	Butter	oz. ½
	Indian Meal, boiled	oz. 2
	Molasses	gill. 0.32
Dinner.	Beef, recently corned, or Ham, boiled	oz. 16
	Potatoes	oz. 8
	Other Vegetables	oz. 8
	Bread	oz. 6
	Pickles	oz. 1
Tea.	Tea	pt. 1
	Bread	oz. 6
	Butter	oz. ½

THURSDAY.

Breakfast.	Coffee	pt. 1
	Bread	oz. 6
	Butter	oz. ½
	Meat Hash, with Vegetables	oz. 8
Dinner.	Semi-stewed Beef or Mutton	oz. 12
	Do. do. Soup	pt. 1
	Potatoes	oz. 8
	Other Vegetables	oz. 8
	Bread	oz. 6
Tea.	Tea	pt. 1
	Bread or Crackers	oz. 6
	Cheese	oz. 3

FRIDAY.

Breakfast.	Coffee	pt. 1
	Bread	oz. 6
	Butter	oz. ½
	rish, fresh or salt	oz. 8
Dinner.	Cod-fish, in Hash	oz. 8
	" with Potatoes	oz 12
	Beets or Turnips	oz. 8
	Bread	oz. 6
	Bread Pudding	
Tea.	Tea	pt 1
	Bread	oz. 6
	Butter	oz ½

SATURDAY.

Breakfast.	Coffee	pt. 1
	Bread	oz 6
	Butter	oz. ½
	Hominy, boiled	oz 2
	Molasses	gill. 0.32
Dinner.	Semi-stewed Beef or Mutton	oz. 12
	Do. do. Soup	pt. 1
	Potatoes	oz 8
	Other Vegetables	oz 8
	Bread	oz. 6
Tea.	Tea	pt. 1
	Bread	oz. 6
	Butter	oz. ½
	Fruit, stewed	oz. 4

HALF DIET.

SUNDAY.

Breakfast.	Coffee	pt. 1
	Bread	oz. 6
	Butter	oz. ½
	Indian Meal, boiled	oz. 2
	Molasses	gill. 0.32
Dinner.	Beef Broth	pt. 1
	" " Meat	oz. 8
	Bread	oz 4
	Potatoes	oz 6
	Other Vegetables	oz. 6
	Rice Pudding.	
Tea.	Tea	pt. 1
	Bread	oz. 6
	Butter	oz. ½

MONDAY.

Breakfast.	Coffee	pt. 1
	Bread	oz. 6
	Butter	oz. ½
Dinner.	Beef Soup	pt. 1
	" " Meat	oz. 8
	Bread	oz. 4
	Potatoes	oz. 6
	Other Vegetables.	oz. 6
Tea.	Tea	pt. 1
	Bread	oz 6
	Butter	oz. ½

TUESDAY.

Breakfast.	Coffee	pt 1
	Bread	oz. 6
	Butter	oz ½
	Hominy, boiled	oz 2
	Molasses	gill. 0.32
Dinner.	Mutton or Beef broth	pt. 1
	" " Meat	oz. 8
	Bread	oz. 4
	Potatoes	oz 6
	Other Vegetables	oz. 6
	Indian Pudding.	
Tea.	Tea	pt. 1
	Bread	oz. 6
	Butter	oz. ½

WEDNESDAY.

Breakfast.	Coffee	pt. 1
	Bread	oz. 6
	Butter	oz. ½
Dinner.	Beef Soup	pt. 1
	" " Meat	oz. 8
	Bread	oz 4
	Potatoes	oz. 6
	Other Vegetables.	oz. 6
Tea.	Tea	pt. 1
	Bread	oz. 6
	Butter	oz. ½

THURSDAY.

Breakfast.	Coffee	pt. 1
	Bread	oz 6
	Butter	oz. ½
	Indian Meal, boiled	oz. 2
	Molasses	gill. 0.32
Dinner.	Beef or Mutton Broth	pt. 1
	" " Meat	oz. 8
	Bread	oz. 4
	Potatoes	oz. 6
	Other Vegetables.	oz. 6
Tea.	Tea	pt. 1
	Bread	oz. 6
	Butter	oz. ½

FRIDAY.

Breakfast.	Coffee	pt. 1
	Bread	oz. 6
	Butter	oz. ½
Dinner.	Cod-fish Hash, with Potatoes	oz. 8
	Bread	oz. 4
	Vegetables	oz. 6
	Bread Pudding.	
Tea.	Tea	pt. 1
	Bread	oz 6
	Butter	oz. ½

SATURDAY.

Breakfast.	Coffee	pt. 1
	Bread	oz. 6
	Butter	oz ½
	Hominy, boiled	oz 2
	Molasses	gill. 0.32
Dinner.	Beef Soup	pt. 1
	" " Meat	oz. 8
	Bread	oz. 4
	Potatoes	oz. 6
	Other Vegetables	oz. 6
Tea.	Tea	pt. 1
	Bread	oz. 6
	Butter	oz. ½

CHICKEN DIET.

Breakfast.	Tea	pt. 1
	Bread	oz. 6
	Butter	oz. ½
Dinner.	Chicken	oz. 12
	Or Chicken Soup	pt. 6
	Bread	oz.

LOW DIET.

Breakfast.	Tea	pt. 1
	Bread	oz. 5
	Butter	oz. ½
Dinner.	Beef Tea, or Mutton or Chicken Broth	pt. 1
	Bread	oz. 4
	Rice, Farina, Corn Starch, or Bread in Pudding	oz. 2
Tea.	Tea	pt. 1
	Bread	oz. 5
	Butter	oz. ½

MILK DIET.

Breakfast.	Milk	pt. 1
	Bread	oz. 6
Dinner.	Rice	oz. 2
	Milk	pt. 1
	Bread	oz. 4
	Sugar	oz. 1
Tea.	Milk	pt. 1
	Bread	oz. 4

BEEF-TEA DIET.

Breakfast.	Tea	pt. 1
	Bread	oz. 4
Dinner.	Beef Tea	oz. 12
	Bread	oz 4
Tea.	Tea	pt. 1
	Bread	oz. 4

NOTE.—Medical Officers who receive this Diet Table are directed to adopt it immediately in the hospitals under their charge, and to comply strictly and carefully with its provisions for thirty days, keeping during that period an accurate account of expenditures from the Hospital Fund. At the end of that time they will report the results of this experimental trial, its effects upon the sick and upon the Hospital Fund, and will make such suggestions as they may deem appropriate, the object being to test the practical operation of the Diet Table, before adopting it as the standard for the General Hospitals.

It is recommended that the diets be prepared according to receipts in the Stewards' Manual.

WM. A. HAMMOND, Surgeon General U.S A.

SURGEON GENERAL'S OFFICE, October 28, 1862.

Medical News.

DISEASES OF THE HEART IN AUSTRALIA.—Inflammation of the pericardium is more common in the colony than in England, and the deaths are more numerous. Thus about 1 out of every 359 deaths which ensued in Melbourne during twelve months was from this disease; while in London it amounted to only 1 out of every 532 of the deaths, and in England to only 1 out of every 889. Aneurism, again, is both more frequent and more fatal in the colony than in England. The deaths in Melbourne in twelve months from this disease were 26 out of 3,593 deaths from all causes—about 1 in 138; while in London the number was only 68 out of 59 103 of the deaths from all causes—about 1 in 869; while in England the deaths were 321 out of 419,865 of the deaths from all causes—about 1 in 1,349.—*Medical Record.*

Original Lectures.

THE EFFECTS OF ALBUMINURIA UPON VISION.

BEING REMARKS MADE BEFORE THE NEW YORK ACADEMY OF MEDICINE.

By HENRY D. NOYES, M.D.,
ASSISTANT SURGEON, N. Y. EYE INFIRMARY.

It is well known that impairment of sight is one of the occasional phenomena of albuminuria. In the first paper by Dr. Bright, published in Guy's Hospital Reports for 1832, in which, out of the one hundred reported cases, he gives a detailed statement of the symptoms of ten, five of these latter had deterioration or loss of vision. Before Dr. Bright brought to light the kidney disease, cases of dropsy were recorded seventy years ago in which attention was called to the remarkable loss of vision of the patients. The origin of this symptom was ascribed to the brain, or left unaccounted for by covering up entire ignorance of the matter under the name of amaurosis. So little attention did this important damage of function excite, that at post-mortem examinations the eyeballs were not examined; and as late as 1852, in Guy's Hospital Reports, will be found one hundred cases of Bright's disease tabulated by Dr. Wilks, in which among the columns of symptoms no mention is made of eye lesions. In France the visual disturbance first awakened investigation. The first paper upon it was published by M. Landouzy in the *Annales d' Oculistique* for 1851. This was the year in which Prof. Helmholz, of Heidelberg, studying why, when the media of the eye are transparent, the pupillary aperture through which the light enters should not permit light to come out again, but should always appear dark, in solving this problem fell upon the invention of the ophthalmoscope. Aided by this simple yet wonderful instrument, the pathology of the deep textures of the eye may, when our limited knowledge of former days is remembered, be said to have advanced to the precision and value of an exact science. We now know that the amaurosis of albuminuria is due to a lesion of the retina, and not of the brain, in the vast majority of cases. Still further, so accurate is the knowledge afforded by the ophthalmoscope, and so great the possible diagnostic skill, that whereas the eye trouble was once regarded as simply an interesting phenomena in the progress of Bright's disease, it has now become an index of unsuspected renal disease, and a means of diagnosis. It has happened to not a few oculists of the present day to have pointed out the lurking malady of the kidney by the ophthalmoscope. This fact gives the occurrence of visual disorder a peculiar significance, and is reason why it should have been assigned special consideration in this discussion before the Academy.

We now are made aware that the eye trouble does not belong to the later stages of the disease exclusively, when anasarca and other symptoms, threatening life, command attention; but that it occurs often at a very early period before any such grave danger has been thought of and no alarm taken.

The retinal disease does not seem to have any traceable connexion with brain troubles. When an albuminuric patient gradually or suddenly loses sight, this does not imply special liability to convulsions. There is loss of sight in consequence of convulsions, not merely during the seizure but enduring for twenty-four or forty-eight hours; then usually to disappear. It must also be stated that in certain few cases there is loss of sight due to cerebral disorder without convulsions—but in small proportion. Graefe says that out of thirty-two cases of albuminuric amblyopia, in thirty there were distinct retinal lesions, while in two nothing appeared in the eyes; in these two cases there were persistent headache and other signs of cerebral disturbance.

Statistics of the frequency of ocular complications in Bright's disease are greatly at variance—there have not been collected sufficient data to give any reliable percentage. It can only be asserted, as the impression of those who see much of eye disease, that this kind of retinitis is of rather frequent occurrence, and that it appears in a considerable number of cases of Bright's disease. It matters not what state of the system may be the especial cause of albuminuria, whether disease of the kidney be primary or be the effect of scarlet fever, or of pregnancy: the ocular lesions may obtain, and are of the same nature in all of them. The only condition necessary to their production is urea circulating in poisonous quantity in the blood.

I cannot refrain, however, from introducing here a remarkable and exceptional case of eye disease produced remotely by Bright's kidney, recorded by Prof. Virchow (*Archives of Pathological Anatomy and Physiology*, B. 10, Heft I. & II., s. 170. 1856). It was panophthalmitis ending in suppuration of both globes and rupture of one of them. At the autopsy was found general dropsy, marked kidney degeneration, hypertrophy of the heart, and lesion of other organs. Upon the endocardial surface of the left ventricle was found an ulcer. The capillary vessels of the choroid coat of both eyes were many of them plugged up by clots and granular matter. These Virchow explains to be emboli, originating in the detritus of the endocardial ulcer floating in the bloodvessels, arrested in the choroidal capillaries, and causing metastatic abscess, as it may be termed, of the eyeballs. This is a rare, and may be looked upon as an accidental occurrence. The uræmic poison never causes mischief in the eye so striking and utter. The loss of sight may be gradual and almost imperceptible in its onset, or it may be sudden. There may be a succession of attacks at variable intervals. The amblyopia may occur when the patient does not suspect himself in other respects out of health, or it may add to the misery of the sufferer when in the last periods of fully declared Bright's disease.

The loss of sight incident to uræmic convulsions is usually only temporary—that due to retinitis is always slow of removal, and in many cases never disappears. It is almost always alleviated if the patient live long enough. I have in mind a case of Bright's disease in a colored woman, in whom the loss of sight took place seventeen months ago, and her vision is now almost entirely restored.

The inquiry may be raised if there be any one of the several forms of Bright's kidney more apt to produce the eye complication. Of seven autopsies reported by Dr. Wagner, *Arch. f. Path. Anat. u. Phys.*, 1857, where the eyes were known by ophthalmoscopic examination before death to be diseased, in two cases the kidneys were large, white, and soft; in five cases they were small, hard, and atrophied. The general belief is that the kidneys are most frequently in the granular, atrophied state.

It has been attempted to be shown that the retinal lesion is directly dependent on heart disease. In the majority of cases heart disease co-exists—but not in a causative relation. In the seven autopsies of Dr. Wagner, five times the heart was diseased by simple hypertrophy, or by hypertrophy with dilatation, but in two cases the heart was perfectly healthy. Two negatives are enough to disprove the absoluteness of the connexion, and shake belief in the alleged causative connexion. I doubt not disturbances of the circulation have an influence on the nutrition of the eye; but if these cause retinitis, why should not the choroid, which is almost entirely composed of a plexus of bloodvessels, be the chief seat of disease? I cannot but think the retinal disease is the direct effect of circulating urea—as much as is pneumonia, pleuritis, or peritonitis.

To come more specifically to symptoms. Patients complain of a cloud which obscures their vision, a fog through which they try to look. The cloud in the case of a sudden accession of eye trouble may be universal, covering the the whole field of vision; but soon it will begin to give way at the edges, and will occupy more nearly the central

part of the field. In many cases the eccentric vision will be as good as usual, while the central dimness is more or less thick. There are sometimes sparks before the patient's eyes and muscæ volitantes; these are not constant. Pain is never experienced. Neither do the globes present outward evidences of disease. There is no external congestion, neither do the pupils give any reliable testimony. They are oftenest entirely unaffected in size and movements; sometimes they act sluggishly, but they never are widely dilated and immovable unless there is total abolition of perception of light. Loss of sight very seldom amounts to this extreme degree. These remarks apply, of course to the case of retinitis, not to blindness accompanying uræmic convulsions, in which there may be paralysis of the pupil.

The only evidence obtainable is by the ophthalmoscope. The lesions are found in the retina. The transparent media are undimmed, except rarely a slight turbidity of the superficial portion of the vitreous at an early and for a brief period. The lesions of the retina vary in degree, and present different phases at different stages. The opportunity seldom arises of viewing the retina within a few days of the inception of disease, but I have once had it; and what others, as, for instance, Graefe, describe, corresponds to what I saw. The optic nerve is extremely red, perhaps so much so as to render it indistinguishable from the normal red color of the fundus, and in this case its situation is only recognised by the emergence of the central retinal arteries and veins. These vessels are turgid, the veins very dark, swollen, and tortuous—at some points indistinct and at other points very distinct, as by their snaky course they advance in front of the focus of the eye or retire beyond it. In place of the normal red color of the fundus, which varies according to the amount of pigment to deaden the reflection through the blood in the choroidal capillaries, and upon which the retina, being in health perfectly transparent, exercises no influence, there is a bluish grey haze. This haze renders the retinal vessels obscure, and is, therefore, easily located in the retina itself. Sometimes when turgidity of the retinal vessels is extreme, their walls rupture and apoplexies are found spotting the surface with bright red irregular patches. These ecchymoses are apt to run in lines parallel to the course of the vessels and spread over them. In this condition of the retina there is very great impairment of sight, indeed there may be total blindness. Within a few days vision will improve, and after a time the opacity will disappear from the retina, and the optic nerve become distinct. Its surface will be very red. But in place of a universally hazy retina will appear white spots in its substance, varying in size, apt to group around the optic nerve and at the macula lutea. They may be no bigger apparently than a pin's head, or may form a large plaque. There may be apoplexies upon them. These spots are the characteristic feature of albuminuric retinitis—they are of a glistening white color, reflecting the light strongly, having such a peculiar glance as to be unmistakable. Their color reminds me of the appearance of fat globules under the microscope. At the macula lutea you find the deposit clustered in a group of very small dots surrounding a dark centre, the fovea centralis—each dot glitters with a bright reflection, and the constellation suggests to my mind the Pleiades in the heavens. It may be asked if this color is enough to found a diagnosis upon. I answer, yes, in connexion with some other features. There are three diseases in which white spots appear upon the fundus oculi. The first is atrophy of the choroid, which in places entirely disappears, and consequently exposes the sclerotica. This is a very chronic process, will be attended with opacities, filaments, and flakes in the vitreous humor, the adjacent choroid will appear thin, and upon the edges of the spots is a deposit of pigment, giving a very distinct inky border. Again, in syphilitic retinitis, an exudation of lymph may occur in a short time. I have seen it appear during one night according to the patient's account, and present a whitish patch. Its color is rather creamy, it has an evident thickness, and partly overlies the retinal blood-vessels. Its border is well defined, whatever its form or extent. The borders of the spots of retinal deposit in Bright's kidney are, where they have any considerable size, never well defined. The border fades away insensibly, and is fringed with minute dots of the same brilliant lustre as the central spot. This is a diagnostic point—and the reason of this formation is understood upon stating that the whole spot is formed by a transformation of microscopic elements, and is in reality an agglomeration of minute points. Outside of the principal spot some of the minute elements of the retina have escaped degeneration, while others have undergone it. There are then in the definition and color of these various spots peculiarities which, closely studied, will reveal their diverse nature, and by which such as belong to Bright's disease may be confidently discriminated.

In blindness following uræmic convulsions, the above appearances do not obtain. Dr. Heymann examined such a case by the ophthalmoscope during the patient's insensibility, and found the optic nerve swollen and standing forwards into the vitreous so as to form a real papilla or "colliculus"—its color reddened, the retinal vessels turgid with blood, and the retina itself rendered faintly hazy. These appearances clearly point to an infiltration of the optic nerve and retina with serum: and this view is confirmed by the persistence of dim sight for some time after recovery from the paroxysm, and the succeeding complete restoration.

What is the microscopic anatomy of the retina in albuminuric retinitis? Numerous observations have been made by competent pathologists; by Virchow, by Wagner, by Nagel, by Heymann, by Müller, by Schweigger, and others. They agree substantially, while certain statements of the earlier descriptions are now modified. The lustrous white spots are thickenings of the retina, and consist of molecular detritus, and globular cells filled with molecules, sometimes containing a nucleus: both these elements are dissolved upon application of ether—they are fatty, and compose the bulk of the white spots. Besides, there are found flakes and masses of amorphous fibrine, simple plastic exudation—of course blood capsules, either whole or disintegrating, will be present, if there are apoplexies. Another striking feature is a marked hypertrophy of the areolar tissue of the retina. These fibres, which form the skeleton of the retina, are most abundant in the layer of optic nerve tubules. They also run in a vertical direction down through all the layers of the retina, and as such were first demonstrated by Müller, under the name of the radiating fibres. The fibrous tissue becomes greatly increased in quantity, and just where its hypertrophy is greatest, the fatty degeneration is most abundant. The fatty particles are by far most numerous in the layer of optic nerve fibres, and they follow the course also of the radiating fibres. The globular cells containing fat are regarded as the cells belonging to the fibres of connective tissue. In the nervous elements of the retina, sometimes little change is found. The optic nerve fibres are swollen by imbibition of serum—and they are also seen opaque and varicose, with diverticuli: the condition is known as sclerosis. The ganglion cells become distorted and misshapen, and suffer to a limited extent fatty degeneration. Fatty molecules are found in the granular layers. The most important structure of the retina, the rods and bulbs, Jacob's membrane, is unaltered.

In the optic nerve is found a large increase of fibrous tissue, and the nerve tubules are subject to the same transformations as in the retina.

In the choroid no change takes place, except sometimes a slight loss of pigment.

The transparent media remain unaltered, excepting a faint haziness of the surface of the vitreous is occasionally presented, and consists of a network of filaments.

The reason of the loss of sight is thus understood. The fatty formations obstruct the passage of light down to the

rods and bulbs, and the conducting power of the optic nerve is impaired. The great development of connective tissue in the optic nerve may give explanation of the aptitude for apoplexies. It causes in contraction, strangulation of the vessels at the optic nerve entrance. The walls of the retinal vessels are themselves also affected by fatty degeneration, weakening their capacity of resistance, and predisposing them to rupture.

The prospect of recovery of sight will be seen to depend upon how far the nerve elements have suffered. The effused blood may be absorbed; the fatty matter may, in course of months, disappear, and if no other serious lesion exist, sight will return. But if optic nerve fibres and ganglion cells have degenerated extensively, complete restoration will be impossible.

Treatment will not be different from that required by the general disease, excepting that in a highly congested state of the optic nerve and retina, leeching or cupping from the temples, and blistering will be of benefit.

Original Communications.

MEDICAL EXPERIENCE AT HARPER'S FERRY,

DURING A THREE MONTHS' CAMPAIGN.

By JOHN C. DRAPER, M.D.,

OF NEW YORK.

Under the influence of the scare which followed the retreat of Banks down the Shenandoah Valley, the 12th, together with a number of our city regiments, were ordered to proceed to Washington. We accordingly left New York on the 6th of June for that city, but at Baltimore orders reached us which changed our destination to Fort McHenry. On our arrival at the Fort we erected our tents, and commenced the study of camp life, and, as we were informed that we should probably spend the whole of our three months' term at that post, we made every preparation to render our stay as comfortable as possible.

The Post Hospital was placed under my brother's charge, and our first care was to renew the stores and medicines, which had reached a very low condition. No quinine, oil, laudanum, chloroform, or, indeed, any ordinary drug being discoverable; but, in lieu thereof, a plentiful supply of ergot, vaginal syringes, and other material suitable for the practice of the obstetrical art. We did not clearly see to what use these latter supplies were to be put, but finally concluded that they were considered by Uncle Sam as necessary addenda in time of peace to his military establishments.

As soon as we were comfortably settled, and had spent about ten days in our new quarters, we received orders to go to Harper's Ferry, which destination we reached on the 20th.

We had now been in the service two weeks, and the regiment had enjoyed excellent health, though it had been recruited hastily, and the physique of the majority of the men was decidedly inferior to that of the regiments which have recently passed through our city. The good health of the soldiers, I think, was in a great measure due to the care with which hygienic rules were enforced; the men being obliged to wash their bodies frequently, and gather in their Sibley tents for three or four hours every day, so as to expose the ground to the purifying action of the sun's noonday rays, thus volatilizing the animal effluvia with which the earthen floor of a crowded tent so soon becomes saturated, and which favors the production of fevers and bowel complaints. The cooks were also obliged to prepare the food committed to their care in a proper manner, and thus a vast amount of the diarrhœa which is so common in new regiments was avoided. In spite, however, of the precautions which were taken, the soldiers would obtain pies and other articles, and many cases of diarrhœa and dysentery were thus produced, but, without exception, they yielded to the action of a single dose of castor oil ℥j., laudanum gtt. xj., given in a little beer or ale, to disguise its taste. The same course was followed after our arrival at Harper's Ferry, and with complete success; for, out of a regiment of about 650 men, we lost but one in four months, and his death was due to continued and uncontrollable hæmorrhage from the mucous membranes of the nose and intestine.

The most interesting medical feature of our campaign was the sudden and complete change in the nature of the prevailing disease, which took place during the first week in September. Up to this time nine-tenths of the cases were diarrhœa and dysentery, but these disappeared, and in their place a fever of a mild type, attended with slight derangement of the liver, appeared, which yielded readily to a mercurial cathartic, followed by ten grain doses of quinine, the patient being usually reported for duty in three or four days. So sudden was the change, that in three days diarrhœa had entirely disappeared, and about an equal number of cases of the above description taken its place; and not only did the disease change, but a different set of individuals were affected; those who had suffered from the bowel complaints escaping the fever to a great extent.

At this time the waters of the Potomac and Shenandoah had fallen so low that in many places they could be crossed without wetting the knee, the greater portion of the beds of both rivers being perfectly dry, and the narrow streams of water which still streaked the almost dry watercourses were of a dark green color, showing that they were fairly laden with vegetable matter, the decomposition of which produced the malaria with which the air was contaminated.

Each day the virulence of the fever increased, and the patients became less and less amenable to treatment, so that those who were attacked at the time the Post was invested by the southern army did not, for the greater part, recover in less than three weeks or a month, and in some the attack has not come on until a month after our return to New York, and has usually lasted for about three weeks, no matter whether the patient is made deaf with quinine or not medicated at all. It does not show any marked remission, and probably presents the results of the action of a mixture of animal and vegetable poisons on the system, both of which must exist in spite of all caution in a camp in the fall season in a southern climate.

To the casual observer Harper's Ferry would seem to be a very healthy position, but the inhabitants informed us that last fall General Johnson was compelled to evacuate it, more than fifty per cent. of his force being disabled by this fever, and in the case of our own regiment, fifty per cent is an under estimate of those who have suffered, while the 22d, which left Harper's Ferry about the 1st of September, has almost entirely escaped, as far as I can find.

The curious fact that those who suffered from diarrhœa during July and August, escaped the fever to a great extent in September, has, without doubt, been noticed by such as have had the opportunity of observing, and the careful examination of such observations might lead to important therapeutical results.

The Congress of Sciences was held at Sienna last month, Professor Puccinotti being President. Two hundred and twenty-six members attended. Amongst other questions, we are told that Dr. Finizio brought up the old one of obstetrical abortion; and that (after the example of MM. Stoltz and Villeneuve in France) the entire section of surgery, Professor Vannoni at its head, legists, and philosophers, openly declared in favor of the Cæsarean section! We need not be surprised, says *L'Union Medicale;* "Sienna is very nigh to Rome." Next year the Congress meets in Rome, under the presidency of Mamiani.—*Brit. Med. Jour.*

THE USE OF COMPRESSED SPONGE IN THE PREVENTION OF LACTEAL SECRETION.

By P. STEWART, M.D.,

OF PEEKSKILL, N. Y.

Some three years ago I reported in the *New York Journal of Medicine* an interesting case of suppression of the lacteal secretion, in the breast of a lady recently confined by means of compressed sponge and bandage. The idea was a novel one to me, never having tried it before, nor seen anything published on the subject.

Since the report of the above mentioned case, I have several times had occasion to adopt the same practice, and uniformly with the same happy result. If others have used the method it has failed to come to my knowledge, and as the remedy is easily applied, and the results in my hands, at least, uniformly successful, it may be of some little service to the "weaker yet better half" of our humanity, to call the attention of the profession once more very briefly to the subject. Every practitioner meets with cases of inflammation of the mammary gland, resulting in suppuration, caused by inability to get the milk from it when first secreted after confinement, and the patient once having endured it, looks forward with tenfold more horror often to the sufferings of a "broken breast," than she does to the pangs of childbirth. Persons have fallen under my observation, both from the cities of New York and Philadelphia, who had in previous confinements been under the care of eminent practitioners in those cities, but yet had endured, as they said, untold sufferings from this cause. When submitted to the treatment under consideration, no pain or suffering of any kind was experienced. Nothing can be more complete and satisfactory, than the result of this practice has been in the several cases in which I have tried it. All other modes of treatment, such as warm fomentations, cold water compresses, belladonna plaster and wash, and various other things, have failed of the desired effect in a majority of cases, but this one never.

The details are simply these:—A flat soft sponge, carefully freed from all foreign substances, large enough to cover the entire breast, with a small hole or depression cut out in the centre for the nipple, is subjected to a pressure of a few pounds for a couple of days, and then applied over the breast; a compress is laid over this, and the whole secured by a bandage passed over the shoulders, and around the waist, so as to produce equal and uniform pressure over the entire surface. The bandage should be tightened sufficiently often to maintain a constant pressure for twelve or fourteen days. The best time to begin the treatment is within twelve hours after the birth, when the sponge is best applied dry, but if it is delayed from any cause until the breast becomes tender, and the milk begins to be secreted, my custom is to dip it in warm vinegar once or twice a day.

The efficacy of this treatment in inflammation of the breast, as well as in other parts, has been attested by others, but in no case can its effect be more happy than in preventing the lacteal secretion.

SINGULAR AND SEVERE CASE OF CHOLERA MORBUS.

By EDMUND S. F. ARNOLD, M.D., M.R.C.S.,

OF YONKERS.

I was called about 9 A.M. on the 2d of November, to see a son of Judge B——, aged 15, a delicate but large and overgrown lad, of nervous temperament, under the following circumstances. On the previous day he had walked hurriedly to the cars (more than a mile and a quarter), had been much frightened in getting on to the same, they being already in motion, had gone all day in the city without food, and in the evening had partaken hastily of a hearty meal of sausage meat. I was further informed that he was in the habit of bolting his food. He went to bed feeling as well as usual. Between four and five A.M., he awoke, complaining of severe chilliness, and shortly after of great pain in his bowels. Considering it to be an ordinary attack of colic, his father administered warm stimuli, applied mustard poultices, etc., without relief. Great coldness of the surface of the body was noticed from the commencement, and as this continued, the parents became seriously alarmed, and I was sent for as above. His symptoms were as follow:—Body and extremities cold and bathed in icy perspiration, breath cold, respirations between forty and forty-five per minute, no pulse perceptible at the wrist, continuous severe pain in the umbilical region, considerable nausea, great thirst and restlessness, countenance pinched, with blueness around the mouth at intervals; his mind remained clear, his voice was somewhat husky, and he was entirely free from cramps; otherwise he was in a state of collapse, closely resembling malignant cholera. I remained with him, administered camphor, camphor with chloroform, hot brandy and water, ammonia, etc., applied hot bottles in profusion around him and to his feet, laid strong mustard paste, and hot hop, and Indian meal poultices on the bowels, rubbed the extremities with brandy and red pepper, and afterwards with hot dry flannels. He vomited two or three times, but threw off nothing but his drinks. The pain in the bowels soon subsided, but it was nearly one P.M. before reaction set in; warmth began then gradually to return, and a feeble pulse became perceptible, which, however, long after the general warmth was restored, remained wild, tumultuous, and irregular. By half past one the skin had pretty much regained its natural heat, and I now, as I believed the undigested food had much to do with the attack, administered ʒ vj. ol. ricini in brandy and water. He had had previous to this one slight movement of light clay-colored fæces preceded by a clot of blood. A little after two he had an attack of hæmorrhage from his bowels, to the extent I should judge of at least a pint and a half, flooding the bed, filling the room with a faint sickening odor, and completely prostrating him again, though he soon rallied under the frequent administration of small quantities of warm brandy and water. Ordered a mixture containing ac. sulph. ar.; to have for nourishment toast tea, barley-water, and chicken tea. 8 P.M. Had one discharge of blood, though much smaller, about an hour after the first; nothing since. Ordered morph. sulph., one-third gr., horâ somni.

Nov. 3. Slept well during the night; there is considerable heat of the skin, expression somewhat anxious, pulse 120, tongue coated with a white fur, much thirst and considerable nausea, bowels tender and slightly tympanitic, no movement, urine scanty, and complains of much difficulty in voiding it. Ordered a mixture of potass. nitr. cal. gr. iv., ol. ric. ʒ vj., post horas tres; hot Indian meal poultices to be applied to the bowels. Also gave him twenty drops ac. hydrocyan. in half a tumbler of water, to take a teaspoonful every half hour when the nausea was troublesome. 7 P.M. Nausea much relieved; has had three slight watery motions without any perceptible quantity of fœcal matter; no blood; otherwise symptoms much as in the morning. Left a Dover's powder in case diarrhœa should set in. Pulse 120 still. Nov. 4. Much as yesterday. Medicines and poultices to be continued, substituting hops for Indian meal. Nov. 5. Much improved; tongue still heavily coated, bowels softer though sore on pressure, dulness on percussion along the whole course of ascending colon, most so, however, towards its cœcal extremity; thirst less; pulse 94. To have one ounce ol. ric. and an injection of warm water and soap in four hours, if necessary. 7 P.M. Had three copious evacuations, of which I saw only the last; it was dark brown, and of the consistence of very thick pea soup; the previous ones I was informed were more solid; pulse 84; dulness has almost wholly disappeared. Nov. 6. Slept well; has been up a little this morning; tongue cleaning at sides; pulse 72; some soreness still of bowels on pressure. Ordered him to drink cold chamomile tea as a tonic; to have a little meat to-morrow. From this time he gained every day, and by the 9th was down stairs and convalescent.

In the above case various causes appear to have combined to induce congestion, which, from the presence of irritating and undigested food, was determined to the bowels. The hæmorrhage was regarded by me, after its first prostrating effects had been overcome, as a favorable symptom, as from the great and protracted collapse which preceded it, I should have otherwise dreaded a very severe and dangerous attack of inflammation.

YONKERS, Nov. 10, 1862.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, June 25, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

(*Continued from page* 219.)

SYPHILITIC DISEASE OF LARYNX.—LARYNGO-TRACHEOTOMY.—REMOVAL OF NECROSED CARTILAGES.—DEATH.—AUTOPSY.

DR. BRIDDON presented a specimen of necrosed cartilage with the following history:—On the 15th of September, 1861, I was consulted by Jules Francois Nazard, a Frenchman, who was suffering from chronic laryngeal disease. His previous history was as follows:—Though never very robust he had enjoyed tolerable good health until twelve years ago, when he contracted syphilis, which was followed by constitutional sequelæ; ten years ago he entered a hospital in Chicago for the treatment of sarcocele, and after a short residence in that institution the testicle was extirpated and he was discharged cured.

Present Condition.—Patient is forty-two years old, of medium stature and good bodily conformation; he has a cachectic worn look, but his body is not much emaciated; the integuments of his extremities and back are marked by the cicatrices of rupial eruptions; linear cicatrices in the inguinal folds indicate the site of glandular suppurations, and another exists in the scrotum of the right side, where incisions had been made for the removal of the diseased testicle; appetite good, tongue clean, large, and pale, pulse eighty-six. His principal suffering being dependent upon dyspnœa, associated with aphonia, my attention was mainly directed to the air passages. Digital examination discovered nothing abnormal about the epiglottis, its edges were sharp, and not rounded by œdema, the fauces were pale, and bore no traces of previous disease. Tracheal breathing was loud and rough, the chest was everywhere resonant, and I could detect no organic changes other than those existing within the cavity of the larynx.

His urine was normal in quantity and quality.

After this I saw the patient occasionally, and he improved considerably, following his occupation, that of a confectioner, with less inconvenience than formerly, and suffering much less frequently from paroxysms of dyspnœa. Nov. 13th I was called to visit the patient on account of an exacerbation of all his symptoms, which he attributed to cold; he was propped up with pillows, and could not breathe in the recumbent position; his appearance was one of extreme suffering from dyspnœa. Directing the use of some appropriate treatment; I informed him that in all probability it would be necessary to resort to the operation of tracheotomy.

On the following day he was somewhat relieved, but still continued to suffer much, and in his inspirations a flapping sound could be detected, which was probably caused by the partial detachment of some of the structures in the neighborhood of the laryngeal aperture.

15th, five A.M., was summoned in haste; the man was fast approaching a condition of asphyxia, his lips were livid, pupils dilated, surface bedewed with cold clammy perspiration, he sat in bed with his hands clenched over his knees, exercising in vain every effort to gain a breath of air; he could not speak, but his imploring look for relief at once determined my line of action. Having procured an assistant from the immediate vicinity, I proceeded to open the air tube. This was no easy matter, the man's neck was extremely short, and could not be lengthened by throwing the head back, he indicated that such a position would destroy him, and stoutly resisted any effort to alter the position in which he maintained it, with the chin approximated to the sternum; add to this embarrassment the fact that all his respiratory muscles were in convulsive action, and the difficulty will be appreciated. However, an opening was made in the crico-thyroid membrane, and carried downwards through the cartilage, a tube was introduced, which allowed the free admission of air, but it was several hours before the patient recovered from the effects of an insufficient supply of oxygen.

It is unnecessary to continue the minute details of the case; he steadily improved in condition, went to his work, and I only saw him at long intervals until the middle of May, 1862, when he again began to fail. He was greatly annoyed by the collection of masses of inspissated mucopus and blood; these appeared to collect in the trachea and large bronchi, and were expectorated with great difficulty; I believe these wads were formed by the accumulation of the products of ulceration, which gravitating downwards from the larynx collected below, and were thrown off in the form of cylindrical moulds of the air passages. No means that I could devise prevented the formation of these obstructions; and exhausted by the dyspnœa occasioned by their presence, and by the violent and long continued efforts required for their expulsion, he became despairing and hopeless. At this time I also observed that fluids taken by the mouth passed through the larynx, traversing the external opening if taken at a time when the tube was removed from its position.

16th June.—Whilst exploring the cavity of the larynx through the external aperture, I detected the roughened surface of necrosed bone. Introducing a blunt-pointed curved bistoury, I divided the thyroid cartilage along the mesial line, and introducing the finger I was enabled to remove three pieces of necrosed cartilage, the largest mass, quadrangular in form, measuring three-quarters of an inch in its transverse diameter; it had evidently constituted the larger portion of the right wing of the cartilage; the other pieces were of smaller dimensions. Soon after the removal of these dead structures the patient expelled some hard wads and was considerably relieved; the respite was, however, only of brief duration, fresh accumulations formed, and the patient died exhausted on the 19th.

Autopsy made two hours after death.—Rigor mortis not yet developed, body still warm and much emaciated, opening in mesial line of the neck occupying the space between the pomum adami and lower border of ericoid cartilage, communicating with air tube. On dissecting the soft parts away from the larynx a cavity was opened, situate over the left wing of the thyroid cartilage; it contained a few drops of thin purulent fluid, and a disc of necrosed cartilage surrounded by an incomplete irregular ring of necrosed osseous structure; it did not communicate with the cavity of the larynx. The trachea, œsophagus, etc., were removed *en masse*. On slitting up the pharynx and examining the interior, the epiglottis was found to be normal, its sharp thin edges did not look as if they had been involved in any inflammatory process; the arytæno-epiglottidean folds were swollen by fibrinous œdema, the prominences formed by the cuneiform and arytænoid cartilages were absent, and examination with the finger did not detect their presence. On exposing the interior of the tube, a cavity was found occupying the perichondrium of the body of the cricoid cartilage, which contained necrotic and disintegrated osseous debris. The mucous membrane of the larynx was pale and roughened by the hypertrophy of its gland structure; the prominences of the chordæ vocales and depressions of the sacculi could not be recognised; at the base of the laryngeal surface of the epiglottis in the middle line was a small hook-like process of calcareous deposit.

On the left side of the interior was a cavity immediately above the cricoid cartilage, which contained a small mass of necrosed bone. On the right side was another opening, also communicating with a cavity occupying the position of the right wing of the thyroid, and from which the large mass of necrosed bone had been removed during life.

The details of this case are necessarily incomplete, inasmuch as the inspection of the body was made in the presence of friends of the deceased, and under the stipulation that only the neck was to be examined.

PYARTHROSIS FOLLOWING VARIOLA.

Dr. Briddon also presented a second specimen of pyarthrosis following variola:—

Mary Robinson, aged two years, native of New York, but of Irish parents, was brought to the N. Y. Dispensary, on the 4th March, 1862, and placed under my treatment for secondary suppurative deposits in both humero-cubital and in the right femoro-tibial articulations.

Father of child died with cardiac disease. Mother is healthy, has lost two children within the last month from variola; the subject of the present case was attacked with variolous fever on the 7th Feb., swelling of the joints commenced on the 18th.

Present Condition.—General appearance cachectic, skin pale and sparsely marked with cicatrices of distinct variolous eruption, tongue clean and moist, appetite fair and bowels regular, respiration normal. The outlines of both elbow-joints are effaced by a fusiform swelling, most prominent over the line of articulation; integument pale and marked by meandering blue veins; a circumscribed redness occupies a point over each external condyloid process, and at which point fluctuation can be readily detected; at other points there is no fluctuation, or it is marked by the thickness of the infiltrated coverings which convey an impression of elasticity to the finger. The ligaments of the joints are relaxed, admitting free lateral movements of apposed articular surfaces, but no crepitus is furnished by such movements, nor do they appear to produce the same amount of pain as in disorganization from other causes. The extremities lie almost helplessly alongside of the trunk and in the extended position.

The left knee exhibits less of the fusiform character, the leg is flexed upon the thigh, and the head of the tibia is displaced backwards upon the posterior aspect of the femoral condyles; this condition is rendered more apparent than real from the fact that the products of inflammation are making their way to the surface in front of the ligamentum patellæ.

This child has remained under my observation up to the present date (June 25th); its hygienic surroundings were very bad, but under the restorative influence of the best dietary that could be obtained, ferruginous and other tonics, its improvement has been steady and satisfactory, one elbow and the knee-joint were opened, the other elbow opened spontaneously; probes introduced through the openings, passed freely into the cavities of the articulations, coming everywhere in contact with bare bony surfaces.

The limbs were maintained in favorable positions by well fitting fenestrated splints which admitted the application of dressing without disturbance.

By the middle of May the openings communicating with the knee and left elbow-joints had closed, pretty free motion could be obtained by manipulation of the knee, but flexion beyond a right angle appeared to be arrested in the elbow by the contact of two bony surfaces.

This morning I introduced a probe into the fistulous aperture communicating with the right elbow, and detected a loose portion of bone. This was removed by slightly enlarging the orifice, and proved to be the external epicondyle.

Three years ago I saw a child under two years old suffering with purulent deposits in the large joints, following an attack of variola. Previous to the outbreak of the exanthema the child had been prostrated by a diarrhœa, attendant on the process of dentition, and it died exhausted after the spontaneous evacuation of several of the joints.

FOREIGN CORRESPONDENCE.

LETTER XVIII.

By Prof. Charles A. Lee.

LYONS—ITS HOSPITALS AND SCHOOLS.

Martigny, the Valais, Switzerland, August 31, 1862.

After completing my observations at Vichy, I came to this place, via Lyons and Geneva. My chief object in coming here was to investigate the subject of Cretinism and Goitre, which have been endemic in this region for centuries. Before noticing these, however, a few remarks on medical matters in Lyons will not be out of place. I first visited the School of Medicine and Pharmacy, at which a summer course of lectures is being delivered on chemistry, botany, pharmacy, and toxicology, also on clinical medicine. The School can hardly be said to maintain its former high reputation, although several able professors are connected with it. During the last winter session there were seventy-five medical students attending the regular courses, and twenty-five the pharmaceutical course. The building is old, dark, and gloomy, and not well adapted to the purposes of a medical college.

I next turned my attention to the hospitals. These are vast and well managed, doing great credit to this noble city. The great civil hospital, *Hôtel Dieu*, is the oldest hospital in France, having been founded in the 6th century, by Childebert, son of king Clovis. It contains twelve hundred beds, mostly free; there are 150 patients, who pay 25 cents per day, (1 fr. 25c.). There are nine surgeons and physicians, besides a large number of internes connected with it. The nursing is done by a society numbering 150 *hospital sisters*, so called, aided by a band of *hospital brothers*. The building fronts on the Quai du Rhone, and extends 1055 feet. It is crowned with a magnificent dome, built in 1737 but not completed till 1842. In one part of the building are rooms for a secondary school of medicine and pharmacy, which is here carried on. There is a smaller dome situated in the middle of four spacious wards, constructed of a Grecian cruciform shape, and under the centre of it is an octagonal altar, visible to all the patients in the wards. The front is ornamented with statues of Childebert and his wife Ultrogothe, also of the Rhone and Saone, the arms of the village, etc. This hospital appears to be admirably conducted, is clean and well ventilated.

The great *Military Hospital* of Lyons is situated on the Quai de la Charité, just above the Hôtel Dieu, and fronting, also, on the river. The old part of the building was not originally constructed for hospital purposes, and it was not till 1831 that it was opened as a military hospital. Since then it has been greatly enlarged, and is now one of the finest hospitals in France.

The *hospices* or alms-houses of Lyons, are also on a grand scale. *La Charité* is the principal. It extends a vast distance along the *Quai de la Charité*, and presents a grand and noble façade; under one of the porches, on a marble table, are engraved the names of its benefactors. This charity receives the aged of both sexes; indigent, and septuagenarians to the number of 400, of whom 160 are males, and 240 females; orphan children exposed, or foundlings; sick children under sixteen; and pregnant females. The kitchens, dormitories, refectories, etc., are on a grand scale, and very conveniently managed. Too much can hardly be said in praise of this whole establishment.

The *Hospice de l'Antiquaile* is also worthy of notice. It is situated on the hill of Fourvieres, on the foundation of an ancient palace of the prefects or governors of Gaul, and where several of the Roman emperors resided, as Germanicus, Claudius, and Caracalla. It was a monastery at first, but as all these houses were suppressed during the revolution, it was converted into an alms-house. During the last forty years it has been greatly enlarged. It now receives the insane of both sexes, abandoned females (filles

perdues) who seek reformation, where they are occupied in various useful occupations; patients laboring under syphilitic affections, scald head, and itch. The inmates generally number about 1200. There is a fine chapel connected, as there generally is with all the hospitals and almshouses of France. The *Hospice du Perron* receives incurables, the indigent, the infirm, etc., containing 115 beds, and a few who pay 350 francs per annum. There are, also, the large establishments *Hospice des Vieillards* and *Hôpital de la Croix-Rousse*, which are chiefly for the aged, so that the laboring classes of Lyons and its vicinity can always look forward to a comfortable asylum in their old age, if reduced to poverty. There are nearly twenty other establishments for the maintenance and support of the sick and the aged in the city or its vicinity, besides those I have already named. And if the managers of our city and county poor-houses could see how similar institutions are conducted in France, they might receive some very useful lessons. I visited, also, many of the silk-weavers, and the manufacturers of lace, velvet, and fine shawls. These carry on their operations, at least most of them, in old, mossy stone buildings, constructed centuries ago; damp, dark, filthy, and poorly ventilated. Many of the weavers, etc., live in the same room where they work with their families, where they cook, sleep, and eat. These rooms were all horribly dirty. The operatives look squalid, filthy, ragged, and half famished. Their wages are scanty, and insufficient to furnish them and their families a comfortable support. There is a strange contrast between the elegance of the plain and figured silks and shawls, which they turn out from their looms, and their own mean, squalid appearance. It seems impossible that such splendid and magnificent fabrics could be the workmanship of such begrimed and haggard workmen. It is evident that the fair goddess Hygiene, has never yet entered these workshops, nor shed the slightest ray of knowledge upon their untutored minds. I know not the rate of mortality among this class of the population of Lyons, but it must necessarily be very large.

Lyons is situated rather low, lying between the Rhone and the Saone, near their conflux, and the streets being for the most part narrow, a high death rate must naturally be expected. Formerly, the streets and quays were very dirty; but in this respect, a great improvement has taken place within a few years; and the recent formation of the Rue Imperiale and the Rue de l'Empcratrice, through the centre of the city, has not only vastly improved its appearance, but contributed greatly to its healthfulness. These streets, which almost rival the finest in Paris, now connect with each other the two principal squares: the Place de Bellecom, one of the largest in Europe, and the Place des Terreaux, in which are the Hotel de Ville, a fine old building, a good museum of paintings and national history, and the theatre.

There is an admirably conducted Academy of Fine Arts in Lyons, and courses of lectures given on various collateral subjects for the benefit of the students. Thus, there is a course of comparative anatomy applied to the Fine Arts, and Prof. JORDAN, who fills the chair, demonstrates the most important anatomical dispositions of the body, and in an especial manner makes known the organs which preside over the movements and expressions; and in order that these anatomical demonstrations may be most useful, he connects with them an explanation of the physiological phenomena connected therewith, and also the study of living models. Several lectures are devoted, in connexion with form and expression, to the principal *chef d'œuvres* of painting and sculpture. Considerable time is given to the anatomy of the domestic animals, and also to zoology in general, and the classification of animals. In the Imperial University lectures were being delivered on pure mathematics, applied mathematics, chemistry, physics, zoology, and mineralogy and geology. These chairs are all said to be very ably filled. I saw but few of the professional men of Lyons, except lawyers and Catholic priests; and I was strongly impressed, as in Paris, by the striking contrast in the features and expression of these two professions. The lawyers of France are the most intellectual-looking class of men I have ever seen. They have fine phrenological heads, and possessing, generally, a well developed nervous temperament and great intellectual activity, their countenances are lighted up by intelligence, and strongly marked expression of feeling and thought. On the contrary, the Catholic clergy are of the earth, earthy. They have a strong animal development and expression; their features do not indicate study, emotion, or mental activity; they seem stupid, inactive, low, merely vegitating on the surface of this earth, doubtless to answer some wise end in the grand rôle of Providence, but what is not so easy to determine. I do not say there are no exceptions to this statement. I know there are. I am acquainted with some intellectual members of the Catholic clergy, who would dignify and honor any profession or station; and in my recent excursions among the high Alps, I have been glad to see considerable numbers of the younger Catholic priests, showing as much bodily activity with their Alpin stock and pack, as any of the pedestrian tourists exhibited. And in all these cases, whether the effect of bodily exercise, I cannot say, but greater intelligence and expression marked their features than I have ever observed in any other individuals of the same class, and although not exactly within the scope or range of my subjects, I may here record an inscription which I read a few days ago in a little chapel by the roadside near Chamounix, placed over a statue of the Virgin— "The Bishop of this Diocese offers forty days plenary indulgence to every traveller who will pause before this chapel, and repeat the following prayer — "O blessed Virgin Immaculate Mother of God, pray for me every day, to the last hour of my life." (I give the translation.)

The climate of Lyons does not present any great attractions to invalids, being cold in the fall and winter, and extremely rainy and foggy. In no other part of Europe, perhaps, does a larger quantity of rain fall, and a third of the whole falls in autumn; north winds predominate, next the south, and then the north-west. Over the greater part of France the south-west winds prevail, but these early blow along the course of the Rhone and the Saone. After the prevalence of south-easterly winds, these rivers are very apt to overflow their banks, by setting the waters back at their mouth, and this often gives rise to intermittent and remittent fevers. In no other part of France are storms more frequent. The nearness of the French Alps doubtless modifies the climate more or less, and has considerable influence on the direction of the winds. It is not till we get below Valence, out of the region of hills and mountains, that we meet with any marked change of climate.

It is not my purpose to describe national scenery, else I might dwell on the picturesqueness and beauty of the region between Lyons and Geneva. The latter place seems to me to possess many advantages for invalids during the summer, as well as all who seek an agreeable residence and a healthy climate. Not that the town has any great beauty in itself, but it is most pleasantly situated, and in one of the healthiest spots in the world, standing on elevated ground at the head of the lake; it is rich in historical recollections, in the excellence of its roads, the beauty of its promenades and environs, and the splendid scenery which surrounds it. It is cloven asunder by the bright, blue, flashing waters of the "Arrowy Rhone." The larger and ancient portion occupying the right beach and extending up the hill, while the modern portion extends along the borders of the lake. The climate of Geneva is, of course, more variable and colder than that of Paris. Much rain falls in the autumn, and fogs are not uncommon, especially in the evening. As a winter residence, a more southern locality would be preferable.

But I have forgotten the Cretins and the Goitre, about which I sat down to give some account. However, as my study of them is not yet finished, nothing will be lost by waiting. I hope to have some photographs taken of the finest specimens, in a naked state, both male and female: we shall then be able to judge whether *cretinism* consists in

mere arrest of development, or whether it is an actual monstrosity.

American Medical Times.

SATURDAY, DECEMBER 13, 1862.

MEDICAL CHARITIES.

The medical profession is the only one, we believe, which habitually *donates* the time and services of its members to the public, in their charitable institutions. The services of all others are well paid for, even the chaplains of our hospitals and alms-houses receiving fair salaries for the time given and talents exerted. The teachers of our public schools, which are as manifestly institutions of charity as are the dispensaries and hospitals, receive liberal salaries, though employed only six hours a day, five days in the week, and eleven months in the year. Heretofore a slight exception to the general rule of gratuitous services being confined to the medical profession, obtained in the practice of the criminal courts. When a prisoner about being tried for his offence was found by the court so poor as to be unable to obtain counsel for his defence, some member of the bar has been requested to act as his adviser, and that duty has been generally, perhaps uniformly, discharged gratuitously. But even this *morceau* of benevolence appears to have lost whatever of professional claim it had, as within a few days we have been informed by the public press, that for legal services thus rendered at the request of the courts, two lawyers have sent in bills, one for over 1000 dollars, and the other for more than 300 dollars. Whether they have been or will be paid, we are not informed; but we are unable to see on what grounds payment can be refused, unless there was a special understanding to that effect.

The medical profession, as such, therefore stands alone in liberality to the poor and destitute. Not only in its services to the inmates of our eleemosynary institutions does this marked feature stand prominently forth, but its private charities, also, far outnumber and outweigh all others. The extraordinary amount of these gratuitous services is almost beyond calculation, and it would be difficult to estimate them, so varied and ramified are they. They embrace every department of medical and surgical practice. We have hospitals, infirmaries, dispensaries, and other medical charities, so called, in which every variety of disease is received and treated, and, with very rare exceptions, without any cost whatever to the public for the professional aid. A few years ago, in a paper read before the Academy of Medicine by Dr. Griscom, the aggregate annual amount *contributed by the medical profession of the city of New York to the support of public charities* was estimated at *one million of dollars*. This estimate would now be nearly or quite doubled, as the increase of institutions of medical charity has exceeded the increase of population. We call this a contribution, or tax, for the support of public charity, for the plain reason that if the members of our profession should at any time unanimously determine to put themselves on the same footing, in this respect, as all others, the inevitable necessity would be thrown upon the public and the Government of *employing* the requisite medical and surgical assistance, at whatever expense. The amount now given by the profession gratuitously would then have to be added to the taxes upon the community; in other words, the expense would be drawn from the pockets of the whole instead of from the brains and muscle of the few. The reply to such a suggestion would probably be: "You receive in return the great benefits of the *experience* which so large a field of practice must render highly valuable." The natural rejoinder to this is: "The same experience would be had *with* pecuniary remuneration as *without*."

It is not our intention to suggest to our professional brethren the adoption of any change in their practice in this respect; but we do desire to call attention to one feature in the management of some of our medical charitable institutions, which seems to us to partake of the character of an imposition upon the liberality and good-will of the profession. It is the practice of these institutions to receive *others than paupers*, and often to a very large extent, who are required to be prescribed for by the professional attendants in the same manner, and on the same terms, as the paupers. In one institution in this city, as its annual reports show, more than two-thirds of its beds are occupied by patients capable of paying, and who do pay, good prices. Several instances of men of wealth have been known as patients in that institution, in preference to remaining at board ng-houses or hotels; and there they receive all the requisite professional skill, good nursing and diet, for a mere fraction of the cost they would otherwise be subject to, and are fully competent to meet. As every such patient, in private, would engage the services of some physician, it follows that by going to the hospital, the fees are lost to the profession. But a worse fact than this is still to be mentioned. Between this same institution, as well as others, and the general government, a contract exists, by which the latter may fill its wards with sick seamen to a certain extent, for whose maintenance the government agrees to pay a certain amount, in which amount it is willing to include a reasonable sum for medicine and *medical attendance*, but which the managers of the hospital decline to receive for these purposes specifically. Consequently the medical attendance is rendered gratuitously, to the manifest and direct detriment of professional incomes. It is known that there is a large fund in the U. S. Treasury, from which these expenses are paid; and we repeat, that the government is willing to pay for the professional services; but the hospital, for some unexplained reason, chooses not to permit it. It is true, that the contract price paid by the government for the use of the hospital, for these seamen, is but just enough to cover the cost of their board, etc. Yet, being willing to pay a specific sum for the medical services rendered, it appears strange that it is not accepted.

More marked still is the arrangement made with the Government for the care and support of the sick and wounded soldiers, who now occupy so large a share of the time and attention of the medical and surgical staff. The sum paid for them is much above the cost of their maintenance, and the hospital is consequently making money by them, especially as a considerable amount of their food is supplied by patriotic outsiders, but no offer, that we have heard of, has been made to divide the profits with the professional attendants.

In view of these facts an ethical question arises in our

minds, which is this, *Is the medical staff of a hospital justifiable in rendering gratuitous services in such an institution, any more than out of it, to patients able and willing to pay for them?* By so doing the income of the profession is diminished, and the more we yield to the practice the more is it likely to increase.

It is certainly not in accordance with that portion of the National Code of Ethics which refers to the "duties of the Public to the Profession," that such practices should continue; and it behoves our profession, stinted, and deprived of many privileges as it is, required even to pay a tax for the privilege of doing its charitable work, to look to the facts above mentioned. The saying of Boerhaave, "the poor are my best patients, for God is their paymaster," strikes a sympathetic chord in the breast of every honorable physician, but it does not follow that all is charity that passes by the name, even when found in public institutions.

THE WEEK.

The *Society for the Relief of Widows and Orphans of Medical Men*, held its Annual Meeting on the 27th of November, and elected the following officers:—For *President*, Dr. Geo P. Camman; for *Vice-Presidents*, Dr. Jacob Harsen, Dr. H. D. Bulkley, Dr. Wm. Detmold; *Treasurer*, Dr. Beadle; *Secretary*, Dr. J. W. G. Clements. *Managers:* Drs. James Anderson, Edward Delafield, Alfred C. Post, S. T. Hubbard, J. J. Crane, Oliver White, Isaac Wood, Elisha Harris, James R. Wood, Isaac E. Taylor, J. R. Van Kleek, John O. Stone, Jared Linsley, S. C. Foster, Joel Foster, John G. Adams, Edward L. Beadle, Abram Dubois, Wm. Rockwell, and S. P. White.

The following is the Secretary's Annual Statement for the present year:—All the funds of the Society, as shown by the last Annual Report, in Sept., 1862, were invested; they amounted to $33,913 60, bearing interest at seven per cent., leaving a balance due the Treasurer of $5 69. The receipts for the year ending September, 1862, were $2,858 67, derived from the following sources:—Interest, $2,250 23; Dues—Life Members and Benefactors, $510; Donation, $98 44; Total, $2,858 67. Disbursed for the same period, $719 72. The Members of the Society now number one hundred and seven, of whom seventy-three are for life, and thirty-four Annual Subscribers; besides, the Benefactors number twenty-six, of whom four are laymen. The Society extends its aid to the families of five of its deceased Members. Annual Members pay an initiation fee of $10, and $10 dues, in semi-annual payments; or $100 paid at one time constitutes a Member for life.

Literally, and also in a higher sense and nobler significance, has this Society, by its wise and loving forethought for the widow and the orphan of deceased brethren, provided a golden chain that happily draws the members of the Society into most fraternal sympathy and kindliness, binding each other in bonds of mutual interest and concern for their personal and professional welfare.

—

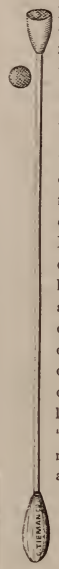
With the incoming Administration in this State a Surgeon General is to be appointed in place of the present incumbent, Dr. S. Oakley Vanderpoel. The importance of that appointment can scarcely be over-estimated. The number of surgeons in the Army from this State is now six hundred. The selection of new surgeons, their proper assignment to duty, and their promotion, rests entirely with this officer. The duties of that office have been performed by Dr. Vanderpoel in a manner most creditable to the profession. We hope his successor will be as free from partisan influence.

Correspondence.

PROBE FOR DISCOVERING BULLETS IMBEDDED IN BONE.

[To the Editor of the American Medical Times.]

Sir:—In cases where bullets are lodged in contact with, or partly imbedded in bone, it is desirable and often difficult to determine whether the end of the probe, when introduced into the track of a wound, is actually impinging on a ball or a bone. My friend, Dr. Kress, of Hosp. No. 1, Evansville, has devised a probe which gives us at once the means of diagnosis. It is made of a common probe, or a knitting-needle, on the end of which is soldered, or otherwise fastened, a piece of hard iron or steel, flat at the end, and made rough with lines crossing each other at right angles, like some kind of files. By means of this ingenious instrument, by simply causing it to revolve on its axis, a little bone or lead, as the case may be, is melted off, and adheres, and may be examined. As is the case with the deep sea line, and the floor of the ocean, we thus draw up from the bottom of the wound a portion of bone or lead, which at once determines the state of the case. The sounds produced by striking lead and bone bathed in pus are not unlike, and the "feel" is often fallacious. I think this little instrument deserves a place in the pocket-case of every army surgeon.



Yours, etc.,

H. R. Wirtz, M.D.,

Med. Director, Army of Miss.

WHITNEY'S CATHETER AS AN EXPLORER FOR BULLETS.

[To the Editor of the American Medical Times.]

Sir:—I wish to call the attention of the profession to a contrivance which may be of great use at the present time. It is a flexible bullet probe, exceeding in value, I think, any heretofore employed. It is simply a "Whitney's Catheter," which was contrived by its inventor years ago, for the purpose of drawing off his urine, which was obstructed by an enlarged prostate gland. While doing duty at Fortress Monroe last summer, Dr. Alexander H. Stevens, of New York, always fertile in useful suggestions, remarked to me that this instrument might be usefully employed in exploring the tortuous track of a bullet. On my return to New York I had one made, and soon after had occasion to use it in the case of Captain D., then at West Point, in consultation with Dr. Head and other army surgeons. We did not succeed in finding the bullet, nor was the operation undertaken with that expectation; but the superiority of the

instrument over the ordinary probes was clearly demonstrated. The instrument, being slightly curved at its extremity, and, at the same time, very flexible, searches out the changes of direction in the track of the bullet, by rotating the end between the fingers.*

Yours, etc.,

FREDERIC D. LENTE, M.D.

COLD SPRING, Nov. 24, 1862.

METHOD OF SUPPLYING ARMY SURGEONS.

[To the Editor of the AMERICAN MEDICAL TIMES.]

SIR:—I noticed in your issue of this week a notice of a letter from several surgeons of Boston, addressed to the Surgeon General, in regard to the incompetency of many of the army surgeons. Now when we take into consideration the number of surgeons in the field, and the manner in which they have been appointed, it is not wonderful that such should be the case. As a general thing the older surgeons have been broken down political hacks, who had no business at home, and therefore could carry with them no practical experience into the army. Then, again, a great proportion of the surgeons are young men. Many of this class are talented and well educated, theoretically, and, under the guidance of men of more mature years, will come to be ornaments to their profession. These young men, I know, would gladly avail themselves of the practical experience of older men. There is also a class of ignorant men, who gained their appointments by political influence, which neither time nor circumstances can alter for the better: they are not capable of improving by experience.

The remedy suggested by the Bostonians is just the thing wanted, as I am satisfied by actual inspection of a number of hospitals. I have just returned from a visit to the hospitals at Frederick, where I spent three days in visiting the principal hospitals, and in social converse with the gentlemanly surgeons there congregated, and I am happy to say that I never spent three days more pleasantly. The hospital arrangements, so far as circumstances will permit, are excellent. They are generally well ventilated, admirably arranged, and perfectly neat and orderly in every respect. I was most happy to see that our brave soldiers were so well cared for and so kindly treated, also that the same kindness was extended to the Confederate soldiers who were so fortunate as to fall into our hands. In this respect no distinction was made: friend and foe, side by side, equally well cared for. The surgeons there in charge impressed me most favorably, as able and judicious. Among the most able and experienced were DRS. HEWITT and LEWIS, of Connecticut, and DR. MOSELY, then Medical Inspector for New York. DR. HEWITT is an able man, gentlemanly in his deportment, and a ripe scholar. The same can be said of the other gentleman named, with many others there located.

But still I felt that there was need of more men of age and experience, to do those very things pointed out by the Boston surgeons, with the exception that they should not be allowed to decide upon or designate the one to perform the operations. Such an arrangement, I am satisfied, would operate injuriously, as it would lead to favoritism, and would go far to discourage and dissatisfy the younger surgeons who go there for experience. Almost any one can amputate a limb, and, with a little advice, can do it well. Older men are required rather as consultants, and to give advice in regard to the medical treatment of the sick and wounded. The Surgeon-General in reply says: Very few first class surgeons have come forward, and Lee appears to be rather surprised that they have not. The reason, in my opinion, is plain. Men of age and experience are generally physically incapable of following a regiment and enduring the hardships of camp life; besides, they are generally in the enjoyment of a good practice, which they do not feel disposed to leave without a corresponding compensation. Then, again, this class of men have been long from the schools, and in regard to minute anatomy have forgotten much; but on the cadaver they will show you at once that they are at home in anatomy, so far as necessary for usefulness. These men do not like to go before a board of examiners, who have only good memories, and submit to an examination in minutiæ which are of no practical importance, and which have escaped them. These men are well known to the profession by their contributions to the medical and surgical literature of the day, and are personally known to many of our ablest surgeons and professors. There are many such men of acknowledged ability as surgeons, who would be willing to serve their country if they could be appointed by giving the best of references, or certificates of qualification, who will never enter the service if they have to go through the red-tape process. In regular service where young men alone are permitted to enter, this course would not do, but in the volunteer service great efficiency could be given to the medical corps in this way. A committee of men of wide world talent from each State, could designate such men as they thought suitable.

Yours, etc.,

E. P. BENNETT, M.D.

DANBURY, CONN., Nov. 22, 1862.

* The probe may be had at Tiemann's, or at Otto & Reynder's, in Chatham street.

Army Medical Intelligence.

DISTRICT OF SOUTH WESTERN MISSOURI.

HEADQUARTERS, ARMY OF THE FRONTIER,
ELKHORN, October 26, 1862.

SURGEON S. H. MELCHER is hereby appointed Medical Director of the District of South Western Missouri, and of the Army of the Frontier.

For the present Surgeon MELCHER will remain at Springfield, and organize his Department in accordance with instructions from the Medical Director of the Department of the Missouri.

Surgeon F. G. PORTER will continue to act as Medical Director of the Army in the Field under the orders of Surgeon Melcher.

Surgeon R. H. PADDOCK will remain in charge of the General Hospital in Springfield until further orders.

By order of Brig. Gen. SCHOFIELD.

CHARLES S. SHELDON, *Major & A. A. G.*

CIRCULAR.

MEDICAL DIRECTOR'S OFFICE,
SPRINGFIELD, Mo., Oct 30, 1862.

In accordance with the above order the medical officers with the "Army of the Frontier" will report to Surgeon F. G. PORTER, all others in South Western Mo. will report directly to this office.

Requisitions for medical supplies and hospital stores will be filled by Purveyor at this Post.

The attention of all medical officers is called to the following extract from the Surgeon-General's Circular, No. 10.

"The want of printed blanks is no valid excuse for not making the Requisition, Returns, and Reports required by the Regulations; when there are no printed blanks, the style, classification, order, and nomenclature of the Supply Table and of the prescribed forms will be observed.

"Many medical officers, both regular and volunteer, have partially disregarded previous circulars issued from this office. These circulars are explanatory orders, and in the future, officers neglecting to comply with their directions will be proceeded against for disobedience of orders."

All medical officers with the Army of the Frontier, or Army of South Western Mo., will without delay report their Regiment or Battalion, and their present post of duty, the number of patients now requiring attention, the conveniences, condition, and quantity of supplies, instruments, etc., with date of commission, or, if a contract physician, the date of contract, and by whom made.

S. H. MELCHER, *Medical Director.*

AIR SPACE IN HOSPITALS.

SURGEON-GENERAL'S OFFICE,
WASHINGTON, November 24, 1862.

THE Surgeon-General directs that the minimum allowance of cubic feet of space for patients in tents and military hospitals shall be as follows:

1st. In all rooms ventilated by windows at the end or one side only, 1200 cubic feet per man.

2d. In all hospitals constructed after plans approved by the Surgeon-General (pavilions with ridge ventilation), 600 cubic feet per man.

3d. In all other buildings occupied as General Hospitals, 800 cubic feet per man.

The maximum number of patients allowed in a hospital tent shall be five in winter and eight in summer.

By order of the Surgeon-General.

JOSEPH R. SMITH,
Surgeon U.S.A.

INDIAN REMEDY IN SMALL-POX.

ERUPTIVE FEVER GENERAL HOSPITAL,
KALORAMA, WASHINGTON, D.C., November 23, 1862.

SURGEON-GENERAL W. A. HAMMOND,
WASHINGTON, D.C.

SIR:—Acting in accordance with instructions received from the Surgeon-General's Office to test the efficacy of "Lane's Indian Remedy for Small-pox," and report thereon, I have the honor to state that I have used the box of "remedy" in the treatment of cases of small-pox in this hospital, and in no case, used either as a gargle, eye-wash, or internal remedy, have I been able to detect any effect, produced upon the patient or the disease, except that in one case the patient, after taking it several days in succession, complained of its producing nausea. In every other case I have found it inert, and as useless as I should expect a decoction of sawdust to be, administered in similar cases.

Very respectfully,
Your obt. servt.,
R. J. THOMAS,
Act. Assist. Surgeon U.S.A., in charge.

APPOINTMENTS.

The following named gentlemen having been approved by the Army Medical Board at Philadelphia, have been appointed Assistant Surgeons in the Medical Staff of the U. S. Army, to date from November 22, 1862:—

DR. CHARLES C. LEE, of Penn-ylvania; DR. SAMUEL H. ORTON, of New Jersey; DR. JOHN W. BREWER, of Maryland; DR. JOHN HOMANS, of Massachusetts; DR. JOHN BROOKE, of Pennsylvania; DR. WM. H. GARDNER, of District of Columbia; DR. JAMES PHILLIPS, of Maryland.

The following assignments have been made of Medical Officers:—

Assist. Surgeon S. M. HORTON, U.S.A, now on duty in General Hospital, Columbus, Ky., will relieve Surgeon CHARLES SUTHERLAND, U.S.A., in his duties as Medical Purveyor, at Columbus, Ky. The latter, on being relieved, will report for duty to Surgeon H. R. WIRTZ, Medical Director Department of the Tennessee.

Assist. Surgeon H. S. SCHELL, U.S.A., is hereby relieved from duty with the Army of the Potomac, and will report for duty to the Medical Director at Washington, D.C.

Surgeons W. H. BREED, JOHN J. REESE, and A. C. BOURNONVILLE, U. S. Vols., and Assist. Surgeons ROBERT R. TAYLOR, LEWIS D. HARLOW, and CALEB W. HORNER, U. S. Vols., will report for duty to the Medical Director at Philadelphia, Pa.

Surgeons HOWARD CULBERTSON and JAMES C. WHITEHILL, U. S. Vols., and Assist. Surgeons E. D. KITTOE, H. M. CRAWFORD, and WILLIAM WATSON, U. S. Vols., will report for duty to the Assist. Surgeon-General at St. Louis, Mo.

Surgeon T. P. GIBBONS, and Assist. Surgeons A. T. WOODWARD, EDWIN FREEMAN, and MITCHELL H. PICOT, U. S. Vols, will report for duty to the Medical Director of the Army of the Potomac.

Surgeon A. B. MOTT, U. S. Vols., will report for duty to the Medical Director at New York.

Surgeon JOHN O. BRONSON, U. S. Vols., now on duty in Washington, D.C., will report for duty to the Medical Director at San Francisco, Cal.

Surgeon F. S. AINSWORTH, U. S. Vols., will report for duty to Major General FOSTER, commanding Department of North Carolina.

Surgeon FRANCIS SALTER, U. S. Vols., will report to Brig. Gen. Cox, for duty with the troops under his command.

Surgeon P. A. JEWETT, U. S. Vols., will report to the Medical Director at Boston, Mass, for duty at New Haven, Conn.

Surgeon DAVID STANTON, U. S. Vols., will report to Maj. Gen. WRIGHT, commanding Department of the Ohio, for duty at Camp Chase, Columbus, Ohio, to relieve Assist. Surgeon J. H. BAILEY, U.S.A. The latter, on being relieved, will report for duty to the Commanding Officer of Alleghany Arsenal, Pittsburg, Pa.

Assist. Surgeons EDWARD S. WHITNEY and W. S. EDGAR, U. S. Vols., will report to Brig. Gen. J. H. CARLETON, U. S. Vols., for duty in the Department of New Mexico.

Assist. Surgeon CHARLES E. SWASEY, U. S. Vols., will report for duty to the Medical Director at Washington, D. C.

Assist. Surgeon LOUIS W. REED, U. S. Vols., will report to Maj. Gen. SLOCUM, for duty with his command.

Assist. Surgeon G. M. STERNBERG, U.S.A., now on duty in General Hospital at Portsmouth Grove, R. I., will report to Maj. Gen. BANKS, at New York city, for duty with his command.

Surgeon F. M. HEISTER, U. S. Vols., is relieved from duty with the Army of the Potomac, and will report in person to Surgeon L. H. HOLDEN, Medical Director Department of the Ohio, and by letter to Assist. Surgeon-General R. C. WOOD, for duty in the Department of the Ohio.

Surgeon J. V. Z. BLANEY, U. S. Vols., has arrived at Norfolk, Va., and entered upon his duties as Medical Director of Gen. VIELE's command.

Surgeon F. SEYMOUR, U. S. Vols., is on duty in charge of General Hospitals Nos. 12 and 16, Nashville, Tenn.

Surgeon W. DICKINSON, U. S. Vols., has been assigned to duty with Gen. WARREN's Brigade, at Hartville, Mo.

Surgeons J. H. BAUCHER and A. B. CAMPBELL, U. S. Vols., have been assigned to duty as Medical Directors of the Right and Left Wings (respectively) of the Army of the Tennessee.

Surgeon C. A. COWGILL, U.S.A., has arrived at Newbern, N. C., and relieved Surgeon DERBY, in charge of the Academy Hospital.

Surgeon W. M. BREED, U. S. Vols., has been assigned to the charge of the General Hospital, corner of 16th and Filbert streets, Philadelphia, Pa.

Surgeon W. W. NASSAN, U. S. Vols., now on duty in St. Louis, Mo., has been ordered to rejoin his station in New Mexico.

Surgeon E. McDONNELL, U. S. Vols., is in Washington, from Sharpsburg with the sick of the 5th Corps, and under orders to report to the Surgeon-General.

Drs. G. W. HOGEBOOM and LOUIS W. REED, have declined appointment as Assist. Surgeon of Volunteers.

Surgeon J. R. MCCLURG, U. S. Vols., has been placed on duty at Jefferson Barracks, Mo.

Surgeon H. WARDNER, U.S.A., has been assigned to the charge of the General Hospital at Mound City, Ill.

Assist. Surgeons GOLDSBOROUGH, 5th Maryland Vols., and KING, 4th Pennsylvania Cavalry, now on duty at Frederick and Philadelphia respectively, have been ordered to rejoin their regiments without delay.

Surgeon P. PINEO, U. S. Vols., has relieved Assist. Surgeon WARREN WEBSTER, U.S.A., in charge of the Douglas

Hospital at Washington, D.C. Dr. Webster reports for duty at the Headquarters Army of the Potomac.

Surgeon R. A. Christian, U.S.V., is temporarily on duty at San Francisco, California, as Medical Director Depart. of the Pacific, during the absence of Surgeon P. G. S. Ten Broeck, U.S.A.

Surgeon S. R. Haven, U.S.A., is on duty with 3d Division, 6th Army Corps.

The orders directing Surgeon T. P. Gibbons, U.S.V., to report at Headquarters Army of the Potomac, have been suspended while he is attending to General Schenck.

Surgeon J. B. Peale, U.S.V., is on duty as Surgeon-in-Chief, 1st Division, Sigel's Army Corps.

Surgeon J. G. Keenon, U.S.V., to duty as Medical Director, 3d Division, District of Memphis.

Surgeon Basil Norris, U.S.A., to report at the Headquarters, Army of the Potomac, for duty as Medical Director of the Grand Division commanded by Major General Franklin.

Assist. Surgeon Charles C. Lee, U. S. Army, to report for duty at the Headquarters Army of the Potomac.

Assist. Surgeon Samuel H. Orton, U.S.A., to report for duty at the Headquarters Department of the Gulf.

Assist Surgeon John H. Brewer, U.S.A., to report for duty to the Assist. Surgeon General at St. Louis, Mo.

Assist. Surgeon John Homans, U.S.A., to report for duty at the Headquarters of Major General Banks.

Assist Surgeon John Brook, U.S.A., to report for duty to the General Commanding Department of New Mexico, to relieve Assist. Surgeon James T. Ghiselin, U.S.A.

Assist. Surgeon James Phillips, U.S.A., to report at Headquarters Army of the Potomac.

Medical Storekeeper, Henry N. Rittenhouse, U.S.A., now on duty at Frederick, Md., to duty as Acting Medical Purveyor to relieve Surgeon Glover Perin, U.S.A., at Cincinnati, the latter to relieve Surgeon Murray, U.S.A, in his duties as Medical Director Department of the Cumberland.

Assist. Surgeon H. Ridgely, U.S.A., now on duty in Washington, to relieve Assist. Surgeon J. C. McKee as Medical Purveyor at Frederick, Md. The latter, on being relieved, to report in person to the Medical Director, Army of the Potomac.

Surgeon T. G. Catlin, U. S. Vols., is on leave of absence at Brooklyn, N. Y.

Surgeon A. J. Phelps, U. S. Vols., is on duty as Medical Director, Left Wing, 14th Army Corps.

The following named officers have been assigned to duty as follows in Philadelphia:—

Assist. Surgeon C. W. Hornor, U. S. Vols., to General Hospital, Wood Street.

Surgeon W. M. Breed, U. S. Vols., to General Hospital, 16th and Filbert Streets.

Assist. Surgeon R. R. Taylor, U. S. Vols., General Hospital, Hestonville.

Assist. Surgeon Lewis D. Harlow, U. S. Vols., General Hospital, 4th and George Streets.

Surgeon A. C. Bournonville, U. S. Vols., General Hospital, 5th and Buttonwood Streets.

Surgeon J. J. Reese, U. S. Vols., General Hospital, Christian Street.

Surgeon W. S. Forbes, U. S. Vols., has been detailed to relieve Assist. Surgeon C. R. Greenleaf, U.S.A., in attendance on sick and wounded officers, at Philadelphia, Pa.

Surgeon Jas. D. Strawbridge, U. S. Vols., has relieved Assist. Surgeon S. M. Horton, U.S.A., in charge of the Floating Hospital at Columbus, Ky.

Surgeon J. R. McClurg, U. S. Vols., has been assigned to the Charge of the General Hospital at Cleveland, Ohio.

At the request of Brig. Gen. F. P. Blair, U. S. Vols., Surgeon E. C. Franklin, U. S. Vols., has been assigned to duty as Medical Director of his command.

Surgeon W. C. Otterson, U. S Vols., has been assigned to duty with Gen. Davidson.

Assist. Surgeon C. E. Goddard, U.S.A., has been placed on duty in the Douglas Hospital, Washington, D.C.

Leave of absence for twenty days has been granted to Assist. Surgeon T. O. Wallace, 93d N. Y. Vols.

Surgeon Robert Murray, U.S.A., has been relieved from duty as Medical Director, Department of the Cumberland, and will proceed to Philadelphia. Pa., and relieve Surgeon Geo. E. Cooper, U.S.A., in his duties as Medical Purveyor.

Leave of absence of thirty days has been granted to Acting Assist. Surgeon H. W. Ducachet, U.S.A.

Assist. Surgeon A. Woodhull, U.S.A., has relieved Assist. Surgeon S. M. Eastman, U.S.A., in charge of the General Hospital, Stewart's Mansion, Baltimore.

The following named officers have been honorably discharged the service of the United States:—

Assist. Surgeon Douglas E. London, 104th New York Vols., from July 31st, 1862.

Assist. Surgeon A. H. Whitford, 99th New York Vols., from October 10, 1862.

Assist. Surgeon Dwight Ruggles, 12th Virginia Vols., from November 22, 1862.

Surgeon J. B. Greely, 1st Rhode Island Cavalry, from August 31, 1862.

Surgeon Albert A. Moulton, 3d New Hampshire Vols., from November 15, 1862.

Dr. W. O. Baldwin has been appointed Assist. Surgeon in the 2d District of Columbia Vols., vice E. G. Lane, resigned, November 24, 1862.

Assist. Surgeon Charles H. Rodgers, 11th Connecticut Vols., now on duty at Hatteras Inlet, has been ordered to join his regiment immediately.

Assist. Surgeon G. W. Hoover, 132d Penn. Vols., to report in person to the Medical Director, Washington, D.C.

The following officers are, by direction of the President, dismissed from the service of the United States, with loss of all pay and allowances due them.

Assist. Surgeon Strathan, 133d Penn. Vols., for incompetency, October 3, 1862.

Assist. Surgeon J. C. O'Neill, 25th New York Vols, for absence without leave, Sept. 10, 1862.

Surgeon C. L. Hubbell, 12th New York Vols., for absence without leave, August 5, 1862.

Assist. Surgeon J. G. Long, 129th Penn. Vols., for intemperance and neglect of duty.

Surgeon Anawalt, 132d Penn. Vols., for absence without leave, Sept. 12, 1862.

The following General Hospitals have been discontinued within the past week:—

Mill Creek Hospital, Fort Monroe, Va.			
Ryland Chapel, Washington, D.C.			
Grace Church,	do.	do.	
Baptist Church,	do.	do.	E Strect.
Epiphany Church,	do.	do.	

It is contemplated that all the Churches in Washington, now occupied as hospitals, will be evacuated and turned over to their proper congregations, within a week or ten days.

Five hundred and twenty sick arrived at Baltimore from Washington on the 24th ult., and five hundred more were forwarded on the 29th.

Surgeon Cresson Stiles, U. S. Vols., has been directed to secure the Marine and Western Pennsylvania hospitals at Pittsburg, Pa., and have them fitted up for the reception of the sick and wounded soldiers continually passing through and arriving in that city.

The following officers have been dismissed the service of the United States:—

Surgeon I. I. McGowan, 2d Excelsior Regt., for drunkenness and neglect of duty.

Assist. Surgeon Oliver S. Belden, 5th N. J. Vols, for incompetency.

Assist. Surgeon W. M. Cooper, 6th N. J. Vols., for drunkenness.

Original Lectures.

LECTURES ON MILITARY SURGERY,

DELIVERED AT THE
COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.
By WILLIAM DETMOLD, M.D.,
PROFESSOR OF MILITARY SURGERY AND HYGIENE.

LECTURE I.

The Duties of the Surgeon in the Field.

Gentlemen:—We have in our lectures on the duties of the military surgeon commenced at the beginning, that is, with the very formation of the regiment. We have spoken of the enlistment, and have shown you that in the examination for drafting you have to guard against being imposed upon by simulated defects on the part of those who want to escape the draft, while in the examination for the volunteer service you have, on the contrary, to guard against overlooking concealed defects; you will otherwise fill the ranks with men unfit for duty, who will only encumber the hospitals, and eventually besiege the Pension Office. We have spoken of the care that is to be taken of the recruits, to avoid the diseases incident upon an entire change of the habits of living and diet. We have followed our regiment into camp, and pointed out the selection of a proper camp site, spoken of the best arrangement of the tents, the construction of latrines, etc., and tried to impress upon you the importance of enforcing the strictest camp hygiene, to prevent those diseases known as camp diseases, and which in all wars are more fatal to the armies than hostile bullets. We have spoken of those diseases as diarrhœa, dysentery, miasmatic diseases, typhus, scurvy, purulent and contagious ophthalmia, etc. We have then accompanied our regiment on a march, and shown you the care the surgeon must take of his men, differing in different seasons of the year.

You have seen that thus far the most important duties of the military surgeon are those of a health-officer, for the purpose of preventing disease and keeping the regiment in an efficient condition for service.

We come now to a part of our duties at once important and exciting, and requiring the utmost coolness and presence of mind, sometimes under the most harassing circumstances. We come to the consideration of the duties of the surgeonduring action on the field of battle. And here let me first say to you that while no true gentleman, and only such should enter our profession, I say while no true gentleman will shrink from danger in the fulfilment of his duty, it is not only not expected of you, but, on the contrary, it would be grossly culpable in you wantonly to expose your life, just as much so as it would be in the commanding general; your services, and therefore your life, are of too much consequence to risk it recklessly or by any kind of bravado. In fact, there is a higher courage required of you than the mere brute courage of facing bullet and bayonet: it is the courage to face immense responsibilities under the most trying circumstances; and many a surgeon would prefer, when the wounded begin to accumulate around him—here an artery bleeding, there a piece of lung or bowel protruding, limbs shattered, and all looking to him for relief—I say many a surgeon, if he does not feel equal to the emergency, would prefer to change his catlin for a bayonet, and rather face the roaring cannon's mouth than calmly, under such trying circumstances, exercise the highest and most difficult duties of his profession. Thus, during and after the battle of Waterloo, some of the continental troops, especially those of Brunswick and Hanover, where the British German Legion had absorbed all the good surgeons, and where after that the regiments could only be furnished with inexperienced and half-educated surgeons, it was found that almost all those surgeons had fled, not for fear of hostile ball or bayonet, but because they did not feel themselves equal to the heavy responsibilities thus suddenly thrown upon them, and the wounded of those armies suffered until they were taken care of by the surgeons of the British army. Therefore, no surgeon should enter the army who has not made himself familiar with all operations, at least upon the dead body, for, when suddenly such vast armies are called into existeuce, it would be vain to expect that all the surgeons should have had previously ample experience, and I am glad to learn that now operations on the dead body are part of the examination for army appointment.

Before we proceed further, we have a few words to say about an institution in which our army until lately has been sadly deficient, I allude to a special ambulance corps for the purpose of removing the wounded, as soon as they fall, to the rear, where they are cared for. Hitherto this duty has devolved upon the comrades, to the detriment of the wounded as well as of the army, and this for very simple reasons: 1st. Every wounded man requiring two men to carry him off, it is evident that every bullet which hits takes three men out of the ranks, and frequently more, for there will always be men willing and anxious to avail themselves of a pretext for leaving the ranks, and they will rarely return, for they have put down their muskets to carry their comrade, and they will always find something to do about the wounded, and thus straggling is encouraged to a fearful extent. It used to be customary in some armies to leave the transport of the wounded to the musicians, but they are not sufficient, besides being wanted for other duties, such as buglemen, to communicate the commands of officers by signals to the tirailleurs, or to the regiment, when in the din of battle the word of command cannot always be heard.

The first historical record of a regularly organized distinct ambulance corps we find in the ninth century, when the Emperor Leo organized such a body. They were mounted, and had to keep 100 feet behind the line of combat; they had two stirrups on the left side, by which the wounded mounted into the saddle behind them. They received besides their regular pay, a gratification from the Emperor for every man whom they thus saved. Since then the institution has become more or less obsolete, for in time of peace such a corps is of course looked upon as an encumbrance; but we find that all the great powers of Europe, when actually engaged in war, have felt the necessity of it, and organized such corps; even the rebel army has its ambulance corps. Our commanding general has been hitherto opposed to its organization; but to the persevering efforts of our efficient and able surgeon-general it is due, that our army will be no longer without this necessary auxiliary, from the want of which hitherto our wounded have suffered in almost all our battles.

The ambulance men should be selected with care; they should be men who are trusty in every respect, who can handle liquor without tasting, who are strong and yet kind, and must be specially trained for their duty. There are two men to each stretcher, who in carrying a wounded man should not keep step, the first man stepping out with the left foot, while the second steps out with the right; in this way the stretcher is less shaken, and the motion more comfortable to the wounded. Let them carry fresh water, some stimulants, old linen, and a few bandages, but I pray you keep tourniqnets out of their reach. It is a general idea that they should be supplied with means to stop hæmorrhage, and it has been proposed that not only each member of the ambulance corps should be thus supplied, but that each soldier should carry a field tourniquet. Now, gentlemen, I do not approve of this extensive and promiscuous use of tourniquets. I believe that the practice would be fraught with mischief:—In the first place, there is very little hæmorrhage on the battle field: when large arteries are wounded and bleed, the wound is generally fatal at once, but in gunshot wounds even large vessels may be wounded and not bleed, because they are lacerated wounds; in the second place, if there be hæmorrhage at the time, it is much easier to stop it by a gentle pressure over the wound than by the tourniquet; in the third place, most laymen have a mortal horror of blood: let a man

spill a tablespoonful or two of blood, and ninety-five out of a hundred will be afraid that he will bleed to death; therefore, give such men tourniquets, and they will see hæmorrhage where we see nothing but a little blood, and will be ready at the least alarm to screw on their instruments. Now, even if these instruments could be used without doing mischief, the amount of good they do would be no excuse for their application; but tourniquets make a wound infinitely more dangerous by producing venous congestion. I speak now of their application by laymen. By the production of venous congestion we have the chances for gangrene very much increased, and also the danger of pyæmia. I do not believe a man ever recovered from a gunshot wound where a tourniquet has been applied on the battlefield by incompetent persons, and kept on for any length of time. It is for these reasons that I condemn them.

The wounded are carried upon the stretchers to the rear, where the surgeon administers at once what is necessary for the moment, and then places them in the ambulance wagons to transport them to the hospital. The drivers of the wagons must be instructed to be careful in driving, and there should be provision of good water on board the wagons, for wounded men always suffer from thirst. The arrangement on our ambulance wagons, when I had an opportunity of seeing them, was faulty, all the water-casks being either leaky or giving to the water such a stroug smell of paint that it was not fit for use, and therefore the casks were left empty.

The day is past where the administration of anæsthetics in surgical operations is a subject for discussion, but the choice of the agent is not yet so definitively settled. There is a large class of bodies, in fact all the volatile hydro-carbons, which possess anæsthetic powers, but at present only two—sulphuric ether and chloroform—are in general use, and recognised as the best, and between these two we have to make our choice. Now, in private practice my choice has been long since fixed. I have discarded chloroform entirely, or almost entirely, for in spite of all precautionary measures there is some danger in its use. Some years ago I came near losing a patient during a trifling operation from the use of chloroform, and only by the most persevering efforts in artificial respiration did I succeed in restoring life, which I had already for some time regarded as extinct. Since then I use, in civil practice exclusively, ether, but in military surgery my choice is quite as definitively settled the other way, and I prefer chloroform. 1st. It is less bulky than ether, requiring perhaps only as many drops as you require drachms of ether, therefore it is easier transported in sufficient quantities. 2d. It acts much more promptly, and, where time is as precious as it is on the field, this is a great advantage. 3d. Where thousands are sacrificed the possible risk of one life is far outweighed by the other advantages. In the whole Crimean war there was but one well authenticated case of death from chloroform.

We now come to the actual duties of the surgeon. On the eve of a battle you are to see that none of your men are disposed to shirk by magnifying trifling ailments. As a general thing, we find it a rare occurrence to see men simulate disease for the purpose of avoiding an engagement; on the contrary, in the present war, regiments who have had hundreds of men in hospital have, when a battle was anticipated, turned out in full numbers, simply because every man demanded the privilege of fighting.

Now, then, the surgeon, in preparing for his duties in the field, should first select a place about fifty or a hundred yards in the rear of his regiment, where he hangs out his red hospital flag. Here should be collected the ambulance and medicine wagons, and hither the wounded are to be brought on the stretchers. The spot should be well shaded and sheltered, if possible, near some fresh water and out of reach of musketry. You should have an operating table, or extemporize one for the occasion. The instruments being all in good working order, an ample supply of chloroform, stimulants, and morphine, as also of fresh straw, splints, linen, and bandages being on hand, the surgeon is ready for work. The duties are difficult and important, yet they may, in a few words, be summed up under two heads: to perform only such operations as are absolutely necessary at the moment, and to apply such dressings as will enable the wounded men to bear transportation. Mind that you are not in the hospital; you are not to treat the patients, but only to put them in a condition to be taken to the hospital. The dressings should be of the simplest kind, easily applied, and, mind you, easily removed. Do not be too liberal with your rollers, and avoid the use of lint, for both will become dry, and stick to the wound, and when the man arrives in the hospital, and the surgeon there having necessarily a great deal of work on hand, a great deal of time is lost and pain inflicted on the man in the removal of such dressings; in fact, the patient, in many cases, would have been better off without any dressing. The best, as a general dressing, is a simple compress wet with cold water or sweet oil, with directions to keep them constantly moist during the transport.

Now, as the wounded are brought in, you will attend to them as they arrive; but if they come upon you in large numbers, you have to make a selection of those most in need of your services. Cases of hæmorrhage should claim your attention first; next come in regular order, the cases in proportion to their severity or the amount of suffering; between two persons equally wounded, if one is an officer give him precedence, but no officer slightly wounded should be attended to at the expense of a private more severely hurt. This should be the rule in this country; in other countries, where officers and privates come from two distinct social classes, this rule may perhaps be somewhat modified.

Now let me give you another rule, that is, not to waste time, where every moment is precious, by investigating cases that are evidently fatal—beyond what humanity demands, that is to afford relief, moral as well as physical—but what I mean is not to let professional interest, which in this case would amount to hardly more than curiosity, lead you to waste time in exploring, for instance, the course of a bullet through the brain or the like, where you can do no good, while you keep men suffering where your skill may save life.

Almost all the wounds that will be brought under your notice will be gunshot wounds. You hear a good deal of bayonet charges, and crossing of bayonets, but I have been through a good many of our hospitals, and have seen thousands of wounded, but do not recollect to have seen a single bayonet wound. The only bayonet wounds I ever saw were inflicted in a sham fight. I was attached at the time to the Royal Hanoverian Grenadier Guards, and in the sham fight our regiment was to make a decisive bayonet charge, the opposing regiments, according to the programme, were to give way, but a good deal of jealousy existing against the guards the line regiments did not heed the programme, and the men actually crossed bayonets. On that occasion I saw a good many, in fact, the only bayonet wounds, and a good many men were maimed for life.

Camp Privies.—Dr. Jarvis, of Mass., in his report to the Surgeon-General on the condition of the camps in that State, says:—"The *privies* were of the usual character—a hole and a pole. But one was filthy, and its neighborhood was filthy, and the appointed place was unapproachable, save by the fearless, and men were attending to their natural necessities in the open air and in the open field, in the sight of all men, and in the sight of all women who happened to be in that vicinity on that level field. And the apparent composure with which the men were discharging this duty, when I was passing as near as I could safely, showed that compulsion and habit had disarmed them of the natural delicacy as to such matters, and changed the habits which they had cultivated before they came to the camp."

Original Communications.

WOUND OF THE FEMORAL ARTERY.

LIGATION OF BOTH CARDIAC AND DISTAL SIDES OF SEVERED VESSEL.—SECONDARY HÆMORRHAGE.—LIGATURE OF EXTERNAL ILIAC.—PERITONITIS.—DEATH.

By LEWIS HEARD, M.D.,
ACTING ASSISTANT-SURGEON, U.S.A.

Private R. B. Cornwell of the 25th Regiment, Ohio Vols., occupation, rake maker, 23 years of age, dark complexion, brown hair, blue eyes; enlisted 21st April, 1861, by Capt. J. P. McIlrath, at Cleveland, Ohio. He was wounded September 14, 1862, in the battle of South Mountain, Md., by a buckshot, which entered the upper and front part of the right thigh. He lost much blood at the time of the injury; fainted several times. Hæmorrhage arrested, by tying a handkerchief around the limb, above the wound. Was conveyed in ambulance the next day to Middletown, a distance of four miles. He remained here three days without surgical aid, the surgeon under whose care he was placed saying he should not have left the field, the injury seemed so slight. On the 18th he rode in ambulance to Frederick city, there took the cars, and reached Washington on the 21st. Here he was placed in Capitol Hospital, at this time in charge of Dr. Shippen.

An examination gave evidence that the femoral artery had been wounded, and that a traumatic aneurism was forming. Water dressings were applied till the 29th, when, by the suggestion of Dr. Hall—a very eminent resident practitioner, who, together with Prof. J. F. May, a highly distinguished surgeon of this city, had been called in—compression by means of the horse-shoe tourniquet was made, and continued until the 4th of October. This was now discontinued in consequence of pain, and want of the desired result, and nothing more was done till the 10th, on which day it was determined to tie the femoral artery, and the operation was accordingly performed by Drs. May and Shippen, assisted by Drs. Hall, Seeley, and others. I should have mentioned that the external wound had entirely healed before making the compression. The shot had entered some four inches below Poupart's ligament, over the track of the femoral artery. The following account of the operation I have from Dr. May, who took an active part in it. Several medical gentlemen, I believe, were present.

An incision was made some four or five inches in length, commencing two inches below Poupart's ligament, and carried down in the course of the artery, as is usual, through the skin and cellular substance. The several fascia were carefully divided; the sheath inclosing the artery and vein exposed and opened. The femoral artery was found to be wounded, and a tumor, or enlargement of the vessel at the point of injury, was observed about the size of a fox grape. Blood would issue from a small opening in this tumor, but was readily controlled with the point of the finger. Dr. M. applied a ligature, first on the cardiac side, but this not restraining the hæmorrhage, which was profuse from the distal side, he tied the artery here also. After this he divided the vessel between the two ligatures, and still the blood welled up from the bottom of the wound at this point, and the Doctor passed a curved needle, armed with a ligature, below and around the bleeding point, tied up the encircled tissues, and the hæmorrhage was stopped. The wound was now brought together and secured by a few points of interrupted suture, and adhesive straps and light dressings of lint and bandage applied. The foot and leg were enveloped in cotton, and their temperature maintained without difficulty.

All seemed to be doing well, when on the sixth or seventh day bleeding occurred, by which several ounces of blood were lost. It was soon arrested, however, and a tourniquet placed upon the limb, left loose, but in a manner to be readily tightened in case of a return of the hæmorrhage. The Capitol being used merely as a temporary hospital, it became necessary to remove the patients to other places, and as our hospital (the Casparis) being near, quite a number of the worst ones was brought there, and put under my care, and among the rest Mr. Cornwell, who was admitted on the 20th of October.

From this time to the termination of the case, the patient was daily under my own eye, his progress and his condition carefully observed. The wound was filling up with granulations of healthy appearance, except at the centre, from which issued, rather freely, a dark bloody matter, strongly resembling dissolved coagula of blood mixed with a small quantity of pus. Pulse on admission 130; limb warm; tongue slightly coated; tolerable appetite; bowels in good condition. Doctors May and Shippen taking much interest in the case, called almost daily for nearly a week to see the patient, and seemed well pleased with the existing state of things.

On the thirteenth or fourteenth day of the operation, the proximal ligature came away by itself, with knot and loop on the end. This was preserved and shown to the medical gentlemen when they called. The healing process was going on favorably, and Dr. May called four or five days after, and learning that nothing of an untoward nature had occurred, expressed the belief that the recurrence of hæmorrhage was by no means to be apprehended, especially at so late a period; but in this we were most sadly disappointed, for on the eighth or ninth day from the coming away of the ligature, on the 30th of October, secondary hæmorrhage again took place, and that profusely. Prompt attention was given, and notwithstanding it was speedily controlled such an amount of blood was lost as to greatly reduce the strength of the patient, and hazard his life. I should judge ℥ xvj. or ℥ xx. flowed out in a very few moments, for it jetted up in a stream near the size of one's little finger. I immediately dispatched a note to our surgeon in charge, W. E. Waters, M.D., of U.S.A., informing him of what had happened, requesting his presence, and suggesting the civility of extending an invitation to Dr. May to accompany him. Dr. Waters being ill at the time could not come, but sent the line to Dr. May, who responded, though not till I was about to begin the operation of tying the femoral artery, as I had resolved on doing, just above the arteria profunda. I should have done this in a short time had the Doctor not come in as he did.

A brief consultation was had; he gave it as his decided opinion that the patient would inevitably die; but to prevent his more immediate death from the loss of blood, advised ligating the external iliac. Thought there would be the same risk of hæmorrhage from the close proximity, above, of the exterual pudic, epigastric, and circumflexa ilii, as in tying the femoral in the first iustance one-half or three-quarters of an inch below the profunda, which he affirms he did. I could not coincide with him in this view of the case; but inasmuch as he had already had so much to do with it, and had shared largely in the responsibility, I did not persist in maintaining the ground I had taken, and he, in the usual way, ligated the external iliac.

And here I would remark that, had the femoral artery been tied at the point I proposed (close to the profunda above), the great danger of peritoneal inflammation would have been avoided. And, moreover, it was far from being certain that hæmorrhage would have again taken place; the patient would have had, at least, one more chance of living, and in case this apprehended accident had followed, the iliac could then have been secured; and even had death ensued from the exhaustion, which, in truth, was quite probable, I am well assured it would have occurred at a much later period. After the operation the limb was carefully enveloped in cotton batting and flannel, and its natural temperature preserved. Having recovered from the more direct influence of the anæsthetic, stimulants were administered freely and an opiate given at bed-time.

Oct. 31*st.*—Rested tolerably through the night, feels

quite comfortable this morning. Pulse 130, more full than on the evening previous. Takes some food and appears less exhausted. In the course of the day he began to complain of pain and soreness in the bowels; fomentations were applied, and directed to be continued, and the following pill ordered to be given:—℞. Pulv. opii, gr. x.; hyd. chlor. mit. ℥j.; mucil. g. acaciæ, q. s.; M. fiat massa, et in pil. x dividenda; give one every two hours. Stimulants still given, but at longer intervals and in less quantity, as there was more reaction. *Nov. 1st.*—Slept but little during the night. Suffers but little pain. Abdomen tympanitic and very tender to the touch; applied a large blister; continued the pills of opium and calomel, with beef-tea, chicken broth, etc. Pulse more frequent, 145. Vomiting took place, and continued to recur at short intervals in despite of various means employed to allay it. Cadaverous expression of countenance; dry tongue; urgent thirst; in short, all the symptoms more unfavorable and portentous, and pointing unerringly to a speedy fatal termination. Not the least hope in the case. *Nov. 2d.*—Had a bad night; not much pain, but almost constant vomiting. Both medicines and food are ejected immediately after they are taken. Pulse 160; so small as scarcely to be felt at the wrist. Bowels more tympanitic and still tender. Leg and foot of natural temperature; mind clear; desires death as a relief from suffering. *Evening.*—All the symptoms decidedly worse. Can hardly live through the night. He died Nov. 3d, at 10 A.M.

Autopsy.—Twenty-four hours after death. Here I would premise that Dr. May, to account for this unlooked-for and extraordinary secondary hæmorrhage, takes the ground that there must be an abnormal division of the femoral artery; and being fully impressed with the idea of the existence of two femorals, supposes that both had suffered injury, and one, as he confidently affirms, he tied, in the manner above mentioned, while the other, not being seen nor supposed to exist, continued open and gave rise to the hæmorrhage and what followed.

The external iliac having been injected downwards, and the popliteal upwards, that the examination might be made with greater ease, and that more satisfactory results might be obtained, the dissection was conducted as follows.

An incision, through the skin and cellular substance, was made over the track of the femoral artery, from Poupart's ligament down to the inner side of the knee; these were dissected up and turned back; the superficial fascia was divided, carefully raised and laid aside; the fascia lata was now divided on a director, and, with much care, dissected from the parts beneath; the sartorius muscle was raised and laid aside, and the sheath inclosing the crural vessels exposed. Poupart's ligament was now cut through, and the incision extended into that made for ligation of the iliac. Consequently the cavity of the abdomen was opened; and here were found all the evidences of inflammation: effused serum, deposition of coagulated lymph, and the small vessels of the peritoneum highly injected. The external iliac, from its origin, and the femoral artery were carefully separated from their surroundings, and traced down to one-half, or, at most, three-quarters of an inch below the origin of the arteria profunda, where the femoral was lost in an aneurismal sac. The femoral vein was likewise traced from where it passes under the crural arch down to the sac, where it, too, was lost sight of; its usual relations to the artery existed. Next, the popliteal and femoral arteries and veins were, with great care, dissected out and traced up to within five inches of Poupart's ligament, where they, in like manner, were lost in the lower margin of the aneurism, which, on being removed from its bed, was found to be about the size of a very large goose-egg, and something of the same shape. The most diligent search was instituted, all of the several parts being dissected out with great care, and no second femoral artery could be found, and nothing discovered in the division and distribution of the arteries of the thigh of an abnormal character.

I am positively assured that no aneurism existed at the time of making the operation of ligating the femoral artery, except the small grape-like tumor above named, and therefore it must have formed since. It had burrowed deep among the muscles, approaching very near the femur, and lying under the deep fascia, had not protruded much in front. This sac, together with the several vessels, was removed and preserved for inspection.

Professor May was present, witnessing and assisting in the examination, and having the most indubitable evidence to the contrary, was obliged to give up his idea of the existence of two femoral arteries. The case seemed inexplicable. The facts connected with the several steps of the operation of tying the femoral I have from no careless or ordinary observer, but a scientific, experienced, and practical surgeon, and one who occupies no unenviable position in the profession; hence his statements are entitled to respect, and his testimony worthy of credence. But how are we to reconcile what is affirmed in respect of tying the wounded femoral artery—both on the cardiac and distal sides of the injury, the upper ligature having been applied three-quarters of an inch below the origin of the profunda, and the distal one, an inch and a half lower down, and the vessels divided between the two—and what was actually proved by the post-mortem examination?

Whence came the blood to form so large an aneurism in so short a time? Could any small muscular branches which may have been given off between the ligatures, anastomosing with some others, have become so enlarged as to have afforded a sufficient amount of blood for this purpose?

In the performance of the operation I do not see how any mistake could have been made. How can this matter be explained?

Caspri's Hospital, Washington, D.C., Nov. 20, 1862.

CASES IN PRIVATE PRACTICE.

By G. A. DAYTON, M.D.,

MEXICO, N. Y.

FALLOPIAN PREGNANCY—DEATH IN 32 HOURS.

On Tuesday the 25th of March, 1862, I was consulted by a gentleman in relation to the illness of his wife. He informed me that she had missed her last menstrual period, and the time had now arrived when her second period should take place, and that she was suffering the usual pain experienced on such occasions, only in an aggravated degree. I advised putting the feet and hips in hot water, and if the pain in the region of the uterus was very severe, to take a dose of morphine. On Wednesday the 26th, about eight o'clock in the forenoon, I first saw her and obtained the following brief history of her case. She was 26 years of age, had been married six years, never been pregnant, had on one or two previous occasions missed her menstrual time without any serious symptoms; that on this occasion she had suffered none of the usual symptoms of pregnancy; that on the day before, in her usual good health, about eight o'clock in the forenoon, while engaged in sweeping her room, she was suddenly seized with severe pain in the region of the uterus, which was accompanied by such "singular feelings" that she thought she was dying, which was immediately followed by faintness and vomiting, and was much distressed to get her breath; that during the night the menstrual discharge had come on, and she had been expecting relief, but had experienced no alteration of her sufferings; that the morphine had produced no appreciable effect, and had made her very sick at the stomach. I found her extremities cold, although she was complaining of the heat of the room; she was very pale. No pulsation could be felt in the carotid or arteries of the forearm; frequent vomiting, which consisted of her drinks, slightly tinged with bile; great thirst; incessantly calling for cold drinks, which were generally vomited as soon as swallowed; great difficulty was experienced in breathing. Stimulants, such as brandy, wine, and whiskey, were freely administered, but like all other fluids taken into

the stomach, were almost immediately ejected. Hot cloths were assiduously applied to the extremities, cataplasms of mustard and chloroform were applied to the surface, but with no effect, and all hope of reaction was at an end, and death was near; her mind remained clear until a few moments before she expired, which took place at four o'clock P.M., thirty-two hours from the time she was seized. The diagnosis was, that death was caused by hæmorrhage in the abdominal cavity; but what particular vessel, or from what cause, was unknown.

Autopsy, forty hours after death.—Rigor mortis well marked. On uncovering the body the abdomen was much distended and tympanitic. On opening the cavity of the abdomen the adipose deposit was nearly two inches in thickness, showing the good health of the patient at the time of the attack. As the cavity was opened a quantity of serum gushed out, this was followed by some fluid blood, which was carefully removed with the sponge, when a large quantity of coagulated blood was discovered; this was carefully removed, when the cause of death was readily discovered, viz.—the left fallopian tube was ruptured at the junction of the middle and ovarian third, and from which opening was protruding a fœtus, inclosed in its membranes, floating in its perfectly transparent waters, and death was caused by the hæmorrhage from the small vessel, ruptured into the cavity of the abdomen; the rupture was about ten inches in length, with ragged edges, and, as before stated, the fœtus, inclosed in its bag of waters, was protruding, and was about the size of a pullet's egg; the fœtus could be clearly seen through the transparent membranes and waters, and its sex (a male) readily distinguished; the umbilical cord could be seen and traced to the placenta, which was about the size of a silver dollar, and was firmly attached to the inner portion of the fallopian tube, a short distance from the rupture; the uterus was about the size usually found in women who have borne children. Its cavity contained some mucus tinged with blood, but on careful examination a strong light revealed no trace of the membrana decidua, which authors tell us lines the cavity of the uterus soon after conception; the ovaries were of the usual size and healthy. The accident or bursting of the fallopian tube, which caused the death of our patient, perhaps was caused by the congestion of the parts consequent upon menstruation.

CASES OF TÆNIA EXPELLED BY PUMPKIN SEEDS.

I.—M. F., a lad of about twelve years of age, had for some months passed portions of tape worm from one to two inches in length; he had previously taken the etherial oil of male fern, followed by castor oil and turpentine in fourteen hours, but with no effect. On Saturday he was ordered to take ℥ij. of pumpkin seeds, to be well bruised in a mortar; on Sunday at noon to take castor oil and spts. turpentiue, each ℥ij.; to take no food after taking the pumpkin seeds. On Sunday afternoon the oil and turpentine operated as a cathartic, bringing away the entire worm 17½ feet in length.

II.—In July last, 1862, Mrs.——, aged about 50, said she had passed portions of tape worm for several months, sometimes several feet in length had been expelled at one time; that she had taken several remedies, among them several drastic cathartics, with no effect. She was ordered pumpkin seeds, bruised well in a mortar, ℥iij., fasting, to be followed in twenty-four hours with castor oil and spts. turpentine, each ℥ij.; this brought away the entire worm twenty-three feet in length. My opinion is, that to make this remedy almost a specific, the seeds should be thoroughly bruised, so that the particles can come in contact with the head of the worm; also that fasting is absolutely necessary to enable the remedy to accomplish its work.

CASE OF POISONING BY THE WINE OF COLCHICUM.

On the 14th of June, 1862, J. B., aged 67, in his usual health before breakfast, took as near as could be ascertained about ℥ij. of wine of colchicum with a raw egg. Supposing that he had taken some kind of wine with his egg, he partook of a light breakfast; in about an hour he began to feel some uneasiness at the stomach, which increasing he soon began to vomit, throwing up what he had taken for his breakfast; pain soon was felt over the region of the stomach with nausea and frequent vomiting; the pain gradually extended itself over the abdomen, which was followed by several large watery evacuations, accompanied by severe griping pain at each discharge. At this time, some four hours after having taken the colchicum, I saw him: the extremities were cold, pulse slow, 45, and very feeble; great feeling of prostration, accompanied with restlessness; vomiting frequent, throwing up his drinks, tinged with bile; great thirst; he complained of severe pain and tenderness over the region of the stomach, and which was extending over the bowels. Evacuations from the bowels were frequent, with pain; the discharges were large and watery, colored with bile resembling the matter vomited. A strong mustard emplastrum was ordered over the stomach, warmth applied to the extremities, small bits of ice were allowed to dissolve in the mouth, and some to be swallowed to allay the thirst, and to check the vomiting sixty drops of fluid ext. opium were given as an enema to allay the pain, which also lessened the frequency of the discharges; the pain and tenderness over the stomach increasing, a blister was ordered, with directions to sprinkle morphine upon the abraded surface to allay his pain; stimulants were used as freely as the case admitted of, but he gradually failed, and died on the 19th with the symptom of gastro-enteritis. No autopsy allowed.

CASE OF

WOUND OF INTERNAL CAROTID ARTERY,

PRESENTED TO THE BRODIE MEDICO-CHIRURGICAL SOCIETY, HELD IN FREDERICK TOWN, MD., NOV. 22, 1862,

By REDFERN DAVIES, M.D.,

ACTING ASSISTANT SURGEON, U.S.A., LATE OF BIRMINGHAM, ENGLAND.

Leverett Evans, aged 22 years, of small stature and feeble build, was wounded at the battle of Antietam, Sept. 17, by a bullet entering (his mouth open) about the middle of the left anterior pillar of the fauces, and issuing at the back of the neck, two inches from the spinous process of the second cervical vertebra on the left side.

A probe passed freely through the two apertures, grating against bone in its course.

He stated that he had lost much blood, producing faintness for several hours after the receipt of injury. Since, however, being a patient in this hospital, he has done well, and, as usual, was walking about the ward, keeping his head as immovable as he could, up to the morning of the 31st of October, when, while lying on his bed, and without any known cause, hæmorrhage of a "bright red color" occurred to the amount of "about a wine-glassful:" the bleeding issued from both apertures of wound, and continuing but for a few minutes, so that when I was in attendance upon him there was only some clotted blood to be seen in his mouth and on the back of his neck. Another hæmorrhage occurred in the course of two days, when "about a teaspoonful" of blood was lost.

Both apertures, as well as discharge from the wound, continued very good, and his general condition, though feeble, was fair. On November 13th, shortly after eating his breakfast, when he appeared as usual, his mouth was observed to be drawn towards the right side, facial expression on the left side was gone, and on attempting to whistle his breath escaped at the left corner of his mouth.

In an hour or so he began to mutter incoherently, act deliriously, and died next day at six A.M.

Post mortem six hours after death, Nov. 14th. Examination of parts involved in this injury showed a sloughing passage in the bullet track, into which was forced for a distance of an inch the last molar tooth; the adjacent soft parts were healthy. Upon injecting the common carotid and

vertebral arteries of both sides, the injection passed readily and well in all save in the left internal carotid artery, where its progress was arrested firmly after passing for a distance of two inches; here its termination was covered in by an organized *cul de sac;* its distal termination, as also its branches were not able to be found.

Ligamentous union and cartilage between the bodies of the first and second cervical vertebra were gone, their opposing surfaces being roughened.

From the foregoing facts I am induced to believe that the internal carotid artery was laid open by the bullet; that from the consequent loss of blood which ensued fainting was induced; that while in that condition a sufficiently strong coagulum was produced to prevent any further escape; and that by the process attendant upon the prolonged suppuration (45 days), the remainder of the artery was disintegrated and passed away in the discharges.

The succeeding hæmorrhages were caused by minute openings into branches of the external carotid artery, which were spontaneously arrested as they spontaneously arose.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

STATED MEETING, Sept. 10, 1862.

DR. T. C. FINNELL, PRESIDENT, IN THE CHAIR.

TUMOR OF THE CLITORIS.

DR. PRINCE exhibited a wax cast taken from a young girl 21 years of age, who about a year previous had primary syphilis. Shortly after the first appearance of the chancre she noticed a small excrescence growing from it. This grew very rapidly, but did not occasion her any inconvenience until within the past two or three weeks, when the lower margin became ulcerated, interfering with micturition and copulation. The mass had attained the aggregate size of a hen's egg, but was irregular and fringe-like in its shape. It was very vascular, firm, and was composed mostly of cellular tissue and mucous cysts, having the usual character of veneral condylomata. A remarkable feature in the character of the tumor was, that it was strongly connected with the clitoris, which was very much enlarged, and at all times erected and quite painful. All the usual remedies failed to show any good result, and finally the mass was removed by the ligature.

In connexion with that case he exhibited another wax specimen, which illustrated the character of a similar disease, yet presenting different characteristics. It was taken from a woman aged 28, an inmate of Bellevue Hospital and patient of Dr. Sayre. The growth occupied nearly the whole surface of the vulva, perineum, and adjacent portions of the gluteal region, was of a florid hue, mucous texture, and very vascular. The growth was very rapid, and on the least irritation was attended with hæmorrhage. The discharge which was afterwards secreted by the diseased surface soon became very profuse, and she became very much emaciated in consequence. The disease was completely cured by applications of tannin and alum.

CROUP—TRACHEOTOMY.

DR. JACOBI presented the respiratory organs of a child two years of age, who died ten o'clock of the night before of croup. He related the following history of the case:—I first saw the child in consultation last Friday morning. He had been suffering for about ten or twelve days from nasal and laryngeal catarrh, and when the attending physician was called, twenty-four hours before I saw the child, there were well established symptoms of croup. Not only was there more or less occlusion of the larynx, but also diphtheritic membranes covering the tonsils and the adjoining parts of the pharynx. The physician made use of the usual remedies, but the symptoms grew more and more grave every hour, and when I was summoned suffocation seemed so imminent that I thought it best to resort to tracheotomy at once. The operation was performed in the usual way, with the exception that the incision into the trachea was made through the thyroid body. The hæmorrhage which followed this procedure was very much less than I expected it would be.

The operation under the circumstances was considered justifiable, inasmuch as I could not make out there was any pneumonia present. About twenty minutes after the operation the child breathed pretty well, and pulse ranged from 135 to 140 per minute. The pulse increased in frequency until the afternoon when it was about 150. The child then took a little of Horwood's tinct. of veratrum viride, a drop every two hours, and the following morning appeared evidently better, there being no positive symptoms of bronchitis present. During that afternoon there was a sudden collapse. The use of stimulants and quinine soon reduced the pulse from 190 to its former frequency, and gave us some hope for a recovery. On the morning of the third day, however, symptoms of suffocation began to show themselves, and the child would throw out from time to time hard shreds of mucous membrane with a temporary relief of the symptoms. The percussion sound was normal and clear posteriorly, but somewhat duller than usual anteriorly. The symptoms of suffocation gradually grew more and more manifest, and the child died last evening in about the same condition as he would have died from the first attack of croup. I have to state that one of the attempts to cure consisted in introducing a pretty strong solution of nitrate of silver. This was done day before yesterday at intervals of thirty-six and twelve hours before death. After the first attempt the child's breathing seemed to be less embarrassed, especially after some of the shreds of membrane were torn out by the feather containing the solution.

A portion of the larynx, pharynx, and trachea were then exhibited. Portions of the tonsils and the whole larynx were covered with pseudo-membranes, which did not show any disposition to separate. The wound made by the operation was so covered by this membrane above and below that the process of healing had progressed very slowly. The evidences of trachitis were very well marked. The membranous shreds could be traced down as far as the bifurcation of the bronchial tubes. The lungs were healthy, with the exception that on the left side there were pleuritic adhesions and several marks of pulmonary apoplexy.

DR. BUCK stated that he had frequently cut through and torn the thyroid body, without encountering any alarming hæmorrhage.

DR. KRACKOWIZER'S experience corroborated that of the two preceding gentlemen, and was inclined to believe that the danger of wounding the body in the operation was very much overrated by writers upon the subject. Tracheotomy was of necessity an operation which should be performed with despatch. He thought it was best, if the operator was sure that the hooks were securely and properly fixed, to cut boldly through the veins, resting assured that the hæmorrhage, though frightful at first, would cease of itself when the tube was introduced. The cardinal indication was to admit air into the trachea, and the quickest means to secure such an end were the best.

(To be Continued.)

DURING the five years 1852-56, according to the Registrar-General's returns, 5415 suicides were committed in Great Britain (including Wales), showing an annual average of nearly 6 suicides (5·87) to 100,000 persons living at all ages, and of 26 to 10,000 deaths from all causes.

A PUBLIC ANALYST IN DUBLIN.—The corporation of Dublin have appointed a public analyst. There were four candidates, and Professor Cameron had a large majority.—*Brit. Jour.*

American Medical Times.

SATURDAY, DECEMBER 20, 1862.

REPORT OF THE SURGEON-GENERAL.

The annual report of the Surgeon-General will be read with interest by the medical profession. It is the first time that an annual report from that department has arrested, or, perhaps, even merited public attention. But now, standing as the guardian of the health interest of our immense army of citizen soldiers, it becomes a document full of interest both to the general public and the profession.

The first fact of interest is the comparatively small expenditure for the fiscal year, ending June 30. This period, it will be remembered, embraced the vast preparations for, and execution of the campaign in the West, South, and South-West, as also the costly campaign of the Peninsula. The expenses of the Medical Department for the current fiscal year must be greatly in excess of the last, owing to the large increase of the army. But there is no branch of the public service which we can so poorly afford to stint and limit as the medical, and whatever may be the increased expenditures for the care and comfort of the sick, the people will liberally sanction them.

It is not a little remarkable that an army recruited in the Northern and Western States, and scattered over the most unhealthy districts of the South, should have passed the summer months without the occurrence of any severe epidemics. Although no statistics of disease or mortality accompanies the report, it may be stated from other sources of information that the percentage for the entire force was smaller than any army in the field in modern times. It is gratifying to learn from the Surgeon-General that, "never before were the sick and wounded of an army so well cared for, as are those who have suffered for their country in the present rebellion," and that "the hospitals are a credit to the nation." The medical officers of the regular and volunteer corps are justly commended. As a body they are deserving of higher rewards than Government is willing to concede to them.

The measures for increasing the usefulness of this department, which the Surgeon-General recommends, deserve the prompt attention of Congress. The importance of an ambulance corps with every division of the army is so apparent, and has so repeatedly been demonstrated, that we trust Congress will ignore the prejudices of military men, and provide for their organization. The increase of the medical staff, both of the regular and volunteer forces, should at once be made to reach the highest figure advised by the Surgeon-General. The increasing demand for competent hospital attendants can in no other way be supplied.

We are glad to learn that the Department of Sanitary Inspection is accomplishing much good, and may be pronounced a success. We have always regarded this branch of the medical service of the army as of the utmost importance to the health of the soldiers, and we have anxiously waited for the definite results of its labors. The corps of inspectors appointed were, in general, men of considerable experience in their special duties, and capable of organizing upon a proper basis this department. But thus far we had learned nothing of their success, and we are highly gratified to be informed from the highest official source, that this branch of service has given satisfaction. The recommendation of a larger inspectorial force and another Inspector-General, is important. It is quite impossible for eight inspectors to do more than examine, and that in the most superficial manner, a portion of our vast army, and the widely scattered hospitals. If the corps of inspectors is increased, we hope the most competent surgeons in the army will be selected; men who are adapted for the position by positive qualifications for this special service.

We have already presented our views of the necessity of an Army Medical School, where the candidate for a position in the Medical Staff of the Army shall be thoroughly educated in the duties of his future profession. It is idle to suppose that the proper instruction may be given in our medical colleges. France and England have been compelled to consolidate their scattered chairs of military surgery in a single school, and the result is a complete and comprehensive course, which is giving a higher grade of educational qualification to the medical corps of their armies. Nor can there be any rational objection to the establishment of a Medical School under Government patronage. It will be placed on the same footing as its military and naval schools, which are now yielding the ripe fruits of years of patient and laborious training.

The Surgeon-General recommends that the building of hospitals be intrusted to the Medical Department. If no other suggestion of the report is approved, we trust this will be. Already great harm has been done in the erection of hospital buildings by men who had not the remotest idea of their uses. In some instances ventilation has not entered into the plan; in the greater number it is lamentably deficient. Obviously the only remedy is to give the entire management of hospital erection into the hands of the Medical Department, which alone is capable of appreciating the hygienic principles involved in hospital construction.

We have not space to notice further this interesting document. It is clearly and forcibly written, and presents for the consideration of Congress suggestions for improvement, which ought to engage the early attention of that body.

THE WEEK.

The English operatives are about to have superadded to their sufferings from destitution, that most terrible of all accompaniments of famine, the true spotted typhus, the "famine fever" of Ireland. So great is the destitution in the "cotton districts," that the greater bulk of the operatives are said to be living at a cost per week which twelve months ago sufficed but for a single day. They have parted with all their available furniture and blankets, and now, with the first frosts of winter, to obtain warmth, and escape rent, they crowd together in small ill-ventilated rooms. Thus are established the conditions necessary for the occurrence and prevalence of typhus. And now this dreaded disease has made its appearance, and in some districts it is so prevalent as to overtask the physicians. It gratifies our national pride to see the hearty response which our citizens have made to the call, to aid in the relief of these sufferers. Over $100,000 have already been subscribed to this fund, with ship-loads of grain. Not content

with aiding the famine and typhus-stricken operatives of England, we notice a call to consider the wants of French operatives, and the propriety of sending them material aid. It is but right that a country, whose free institutions excite the warm and hearty sympathy of the poor and oppressed of Europe, should contribute largely from the products of its teeming fields, and its overflowing granaries, to their relief.

—

The ball has been extracted from Garibaldi's wound by Prof. Zanetti, one of his Italian attendants. The French are jubilant over the result, as proving the superiority of French surgery, and have presented Nélaton with a *souvenir*. The English do not conceal their chagrin at their discomfiture, but take comfort from the weak apology that the English surgeon examined the wound at an early date. Meantime, the merits of the Italian surgeons, who have been so rudely and officiously interfered with, are entirely overlooked. They first decided that the ball was lodged in the wound, indicated the course of treatment, and finally removed the offending body. They are entitled to all the credit attached to the surgical management of the case.

—

In this number we commence a series of lectures on Military Surgery, by Prof. Detmold, who has recently been appointed to the chair of Military Surgery and Hygiene, in the College of Physicians and Surgeons. The instructions of one so widely known as an eminent and successful teacher of practical surgery, need no commendation at our hands. We will only add that these lectures will form an attractive feature of our next volume.

Correspondence.

FRENCH MEDICAL INTELLIGENCE.

At a late *Séance* of the Paris Academy of Medicine, the discussion on exophthalmic goitre, of which I gave a sketch in my last communication, was re-opened by M. Bouillaud, the president, and treated of *in extenso*. That the phenomena it presents were owing to a paralysis of the grand sympathetic, as alleged, was not for a moment admissible, for what so unnatural as to ascribe to the paralysis of a nerve results so different in nature as the luxation of an organ, exophthalmia; an organic lesion, hypertrophy of the thyroid gland; and finally, some palpitations. For cause more rational he would rather invite consideration to the great resemblance that the subjects of this malady bear to the victims of onanism. Every one admits that derangement of the genital functions appears to influence a development of the thyroid body, as in gestation for example it is often hypertrophic, and he has seen several cases wherein the malady was traceable *only* to onanism. He does not pretend to attribute the development of exophthalmic goitre to onanism *exclusively*, but to every excess and abuse in general of the sexual functions. M. Trousseau, he adds, is not entitled to any applause for his agglomeration of well known but incompatible phenomena, with a view to forming a new *entité morbide*, and finally closes by offering the following conclusions:

1st. Of the three elements attributed to the malady called by M. Trousseau, Maladie de Basedow* ou de Graves,† there is one, the cardiac element, which has no necessary relation with the two others. This breaks the famous triad.

2d. Between the two other elements there is no actual identity, since exophthalmia pertains to the class of luxations as much as the goitre pertains to that of excess of nutrition or hypertrophies. The coincidence of these two states is subservient to conditions which are not sufficiently known. But we must hold in consideration the influence exercised in certain cases from compression of the external jugular veins by the tumefied thyroid body.

3d. The etiology of exophthalmic goitre does not appear to have sufficiently attracted the attention of our predecessors. For our part, we have believed it our duty to signalize as one of the causes, if not the essential cause, the species of excess so common and so prolific in grievous consequences, of which Tissot and Lallemand have made an especial study.

It has been stated that M Trousseau rejects the word cachexy in connexion with the disease under consideration, and defines cachexy as "la dernière expression de la chlorose ou de l'albuminuric, c'est une sorte d'altération profonde, indeterminé, irremediable de l'organisme." M. Beau sees differently, and makes use of the term *cachexie exophthalmique*, and defines it as a cachexy, or an anæmia, or chloro-anemia, in which are to be found a marked predominance of cardiac and vascular symptoms. And further, that there are two characteristic lesions which separate it from other cachexies or anæmias, viz. goitre and exophthalmia.

In considering the causes of the *cachexie exophthalmique*, M. Beau declares himself to be of decided opinion on this point, and relates the following seven cases in support of the causes being chiefly moral:

1. A lady, whose husband held a high position under the government of Louis Philippe, and having no personal fortune, fell to the grade of mediocrity with the reverses of the Revolution. She contracted the exophthalmic cachexy.

2. A lady lost by litigation a part of her fortune, and became similarly affected.

3. A Russian lady, greatly afflicted by reason of separation from her husband, whom she ardently loved, and of whom she was jealous, was taken with the cachexy, which resisted for a great length of time all therapeutic agents. At Paris, where her husband came to rejoin her, she was successfully treated with the *ferrugineux*, until her husband was again compelled to leave: from this moment the treatment failed, and the disease reappeared in all its severity.

4. The young daughter of a Parisian artisan could not marry with a young man of her choice, and contracted the same malady.

Finally, three men, two of whom are provincial practitioners, exhibited similar signs after deep afflictions. Singular to say, in these last exophthalmia was wanting, the disease being only substantiated by the cachectic state, the heart affection, and the goitre.

Cygnet.

A day or two ago, a neat little printed circular, headed "Funeral Depôt," was dropped into our letter-box, and in it we read:—

"Mr. F—— presents his compliments to Dr. ——, and begs to inform him the usual Commission will be allowed on all Business recommended to the above Establishment."

We confess that our feeling was one of acute admiration at the cool impudence of the undertaker who had favored us with the note; but our admiration was changed into unmitigated wonder, when we subsequently learned that there were not lacking in town medical men who were but too willing to take the office of commission agent to an undertaker; and that a well-known practitioner had but a few weeks previously received for one funeral—one "piece of business" he had recommended—no less a commission than £50! "You see, sir," said our informant, "it was a first case. The maximum commission is usually 20 per cent.; but in this instance, anxious to secure the interest of the gentleman, who is rapidly rising in practice, and the job being a good one, 25 per cent. was given."—*Lancet.*

* A German. † Dr. Graves of Dublin.

Army Medical Intelligence.

ANNUAL REPORT OF THE SURGEON-GENERAL, U.S.A.

SURGEON-GENERAL'S OFFICE,
November 10, 1862.

SIR:—I have the honor to lay before you a statement of the fiscal transactions, and a report upon the operations generally, of the Medical Department of the Army, for the fiscal year ending on the 30th of June, 1862.

The amount of the appropriation for the Medical and Hospital Department ou the 30th of June, was:

In the hands of disbursing agents	$6,006 62
In the Treasury of the United State	41,172 92
Amount appropriated per Act, July 17, '61	1,271,841 00
Amount appropriated per Act, Feb. 25 '62	1,000,000 00
Amount appropriated for deficiency to June 30, '62, approved Feb. 25, 1862	125,000 00
Amount refunded into the Treasury, on account of Medical and Hospital stores sold at auction, viz. D. D. Morrison, $830.60, John Moore, $950.50, E. H. Abadie, $830.48, I. D. Cotton, $240.00, Samuel Elliott, $18.82	1874 35
Total	2,445,894 89

Of this sum there has been expended on account of pay, etc., of private physicians, contracted in 1861	85,052 91	
do. do. 1862	86,597 76	
For medicines, instruments, hospital stores, etc.	2,249,462 52	2,871,113 19
Leaving in the hands of disbursing agents		74,781 70

It has been usual for a report of the sickness and mortality of the Army to accompany this report, but it is found impracticable, arising from the vast amount of labor incident thereto, and it will be furnished, it is believed, in time for publication as a supplement to the "Surgeon-General's report for the fiscal year ending June 30, 1862." In the meantime, however, I am able to present the following statement of General Hospitals, and the number of patients according to the latest returns received at this office.

Names of Hospitals.	Location.	No. of Patients.
Ascension	Washington	294
Armory	"	486
Carver	"	1273
Columbian	"	728
Cliff barracks	"	1087
Casparis	"	113
Douglas	"	345
Eckington	"	330
Emory	"	902
Epiphany	"	172
Ebenezer	"	137
Finley	"	561
Harewood	"	1834
Judiciary	"	491
Kalorama	"	19
Mount Pleasant	"	1351
Odd Fellows' Hall	"	168
Patent Office	"	660
Ryland Chapel	"	101
Stone	"	92
St Elizabeth	"	135
Trinity	"	315
Union Chapel	"	47
Cranch	"	173
St. Aloysius	"	239
1st Division	Alexandria	585
2d "	"	512
3d "	"	534
Camp Parole	"	347
Fairfax Seminary	"	1176
Seminary	Georgetown	115
Union	"	174
Presbyterian	"	117
Trinity	"	191
College	"	293
Dunbarton	"	97
Camden Street	Baltimore	575
Stewart's Mansion	"	450
Patterson Park	"	282
Newton University	"	202
McKim's Mansion	"	332
West's Buildings	"	682
Annapolis	Annapolis, Md	1197
General Hospital, No. 1	Frederick, Md	717
" " 2	"	194
" " 3	"	306
" " 4	"	261
" " 5	"	491
" " 6	"	193
Camp A	"	697
" B	"	893
Broad Street	Philadelphia, Pa	785
South "	"	202
Wood "	"	186
Fifth "	"	213
St. Joseph's	"	120
Christian street	"	137
West Philadelphia	"	1863
Pennsylvania	"	100
Summit House	"	147
Fourth street	"	221
Catharine "	"	85
Master "	"	214
Front "	"	186
Turner's Lane	"	154
Race Street	"	313
Hestonville	"	151
Germantown	"	139
Filbert Street	"	313
York	Pennsylvania	926
Reading	"	202
Harrisburg	"	597
Chester	"	816
Hammond	Point Lookout, Md	977
Bellevue	New York	969
David's Island	"	2146
Jews	"	53
Ladies' Home	"	263
City	"	240
Fort Wood	"	508
Twenty-Eighth Street	"	86
Blackwell's Island	"	248
Brooklyn	"	131
Long Island College	"	122
Fort Schuyler	"	475
St. Luke's	"	56
Fort Columbus	"	93
New Haven	Connecticut	175
Portsmouth Grove	Rhode Island	1322
Newark	New Jersey	1343
Claresville	Maryland	468
Beaufort	North Carolina	269
Newbern	"	118
Portsmouth	"	58
Hilton Head	South Carolina	227
Beverley	Virginia	61
Grafton	"	152
Parkersburg	"	59
Wheeling	"	74
Fort Monroe	"	1690
Chesapeake	"	238
Mill Creek	"	681
Hampton	"	852
Yorktown	"	162
St. James	New Orleans, La	300
Marine	"	120
City	St. Louis, Mo	447
Marine	"	193
Charity	"	85
House of Refuge	"	719
Good Samaritan	"	196
Benton Barracks	"	106
Convalescent	"	1921
Jefferson Barracks	Missouri	1049
Jefferson City	"	100
Springfield	"	251
Keokuk	Iowa	1520
Quincy	Illinois	422
General Hospital, No. 1	Louisville, Ky	145
" " 2	"	138
" " 3	"	158
" " 4	"	227
" " 5	"	116
" " 6	"	134
" " 7	"	125
" " 8	"	134
" " 9	"	125
" " 10	"	129
" " 11	"	133
" " 12	"	149
" "	Columbus, Ky	78
Floating Hospital	"	20
Padneah	Kentucky	214
Bardstown Road	"	80
Greenup street	Covington, Ky	61
U. S. Hospital	"	173
Seminary	"	230
Union City	Tennessee	60
Memphis	"	676
Jackson	"	551
General Hospitals, (5)	Evansville, Ind	1070
Marine	Cincinnati, Ohio	62
Third street	"	61
West End	"	85
Camp Dennison	"	1582
Washington Park	"	228

The number of General Hospitals is thus seen to be 150, and the total number of patients in them, 58,715.

During the past year the health of the troops has been remarkably excellent. No epidemics of any severity have appeared among them, and those diseases which affect men in camp have been kept at a low minimum. Scurvy has

been almost entirely prevented, and yellow fever, from which much was feared, has had but few victims. This immunity is due to the excellent hygienic arrangements instituted, and to the cordial manner in which Generals in command have co-operated with the proper authorities.

In an army of the size of that now maintained by the United States, it was of course to be expected that the absolute number of sick would be very large, and the important battles which have been fought have thrown a large number of wounded on the care of the Department. At present the total number under the charge of officers of the Medical Department is not short of 70,000, and immediately after the battle of Antietam it was over 90,000. That this large number could be provided for without some cases of unnecessary suffering occurring, would perhaps be too much to expect; but I must commend the Medical Corps, both of the Regular and Volunteer service, for the faithful and efficient manner in which their duties have been performed. In the discharge of their duties Medical Officers have been very much aided by the contributions of the people of the country, and by the efficient co-operation of the Sanitary Commission and Relief Associations.

In addition to providing the sick and wounded with medical attendance and medicines, much has been done by the Department in furnishing food, clothing, and comforts of various kinds. From much observation, both at home and abroad, and from the concurrent testimony of distinguished foreign medical officers, I am satisfied that never before were the sick and wounded of an army so well cared for as are those who have suffered for their country in the present rebellion. The hospitals, I take pride in saying, are a credit to the nation.

Before the several medical boards in session during the year (from July 1st, 1861, to June 30th, 1862), a large number of applicants for appointment in the medical staff of the Army were invited by the Secretary of War. Of these sixty-six candidates duly presented themselves. Thirty-three of this number were approved, and five rejected; the remaining twenty-eight withdrew, one on account of physical disqualification. Before the same Boards eleven Assist. Surgeons were examined for promotion, nine of whom were found qualified, and two not considered as coming up to the standard of merit required. In the examination by these Boards, the standard of attainments required for success was much lowered, the Board in New York being ordered to examine two candidates each day for the regular army, while the examination of candidates for the appointment of Surgeon of Brigade became little more than a farce. Since the 1st of June last, however, the standard of examination has been raised, and the gentlemen now entering the Medical Staff have been found fully competent to undertake the important trust with which they are charged.

The breaking out of the rebellion found the United States Army with a Medical Department arranged for a peace establishment of 15,000 men. Experience soon demonstrated the fact, that, however efficient its officers might be, the organization was such as to ill adapt it to the necessities of a large force in time of war. Partial progress in the right direction was made by Congress in increasing the rank of the Surgeon-General, adding a limited Inspecting Corps, and increasing the number of Surgeons, Assist. Surgeons, Medical Cadets, and Hospital Stewards. The Department was also placed on a more independent footing, and its whole status elevated. But there are still other measures, which, if adopted, cannot fail to add to the efficiency of the Department, and these I desire to urge through you on the attention of Congress.

First among these is the establishment of a permanent Hospital and Ambulance Corps, composed of men specially enlisted for duty in the Medical Department, and properly officered, who shall be required to perform the duties of nurses in the hospitals, and to attend to the service of the ambulances in the field. By the establishment of this corps several thousand soldiers, now detached as nurses, cooks, etc., would be returned to duty with their regiments, and the expense now incurred by the necessary employment of contract nurses obviated. A corps formed upon the basis of two men to each company in service, organized into companies of 100 privates, with one Captain, two Lieutenants, four Sergeants, and eight Corporals to each company, would relieve the line of the Army from all details for the Medical Department, and enable the Department to render far more efficient services to the sick and wounded than it is capable of affording under the present system. The necessity of such a corps has been recognised in all European armies, and I am able to speak from personal observation of the great advantages to be derived from it.

I regard an increase of the Medical Corps, both of the regular and volunteer forces, as absolutely necessary. The law of Congress, approved July 2d, 1862, provides sufficiently, except for Cavalry and Artillery regiments, for the wants of troops in the field, but the service in hospitals has to be filled to a great extent by the employment of contract physicians. I therefore recommend that the Medical Corps of the Regular Army be increased by twenty Surgeons and forty Assist. Surgeons, and the Staff Corps of Volunteer Medical Officers by fifty Surgeons and two hundred and fifty Assist. Surgeons. This last Corps now consists of 200 Surgeons and 120 Assist. Surgeons. The Cavalry and Artillery organization requires Medical Officers as much as Infantry. The omission on the part of Congress should be supplied; a Surgeon and two Assist. Surgeons should be authorized for each regiment of Cavalry, and for each regiment of heavy Artillery, and an Assist. Surgeon to each Light Battery.

Under the First Section of the Act of June 30th, 1834, Assist. Surgeons of the regular army must have served five years before being eligible for promotion as Surgeon. On the 1st of November there were but six Assist. Surgeons in the army who had served five years. The effect of this law will be to prevent the filling of vacancies which may occur in the grade of Surgeon, and I therefore recommend that so much of said section as requires Assist. Surgeons to serve five years as such, before being eligible to Surgeoncies, be repealed.

The number of Medical Cadets is altogether too small for the necessities of the service. I therefore recommend that authority be given to appoint as many as may be required, in accordance with existing laws on the subject.

The institution of a Medical Inspecting Corps has been productive of excellent results. The number of Inspectors authorized is, however, too limited to enable the service to be as efficiently performed as is desirable. I therefore recommend that two Inspectors General and eight Inspectors be added to the present organization. The authorization of an additional Assist. Surgeon-General would also be a measure of great propriety.

Considerable progress has been made in the establishment of an Army Medical Museum. The advantages to the service and to science from such an institution cannot be over estimated. I respectfully recommend that a small annual appropriation be made for its benefit.

An Army Medical School, in which Medical Cadets and others seeking admission into the Corps, could receive such special instruction as would better fit them for commissions, and which they cannot obtain in the ordinary medical schools, is a great desideratum. Such an institution could be established in connexion with any General Hospital, with but little if any expense to the United States. A hospital of a more permanent character than any now in this city is, I think, necessary, and will be required for years after the present rebellion has ceased. I therefore recommend that suitable buildings be purchased or erected for that purpose. If this is done the Medical School and Museum will be important accessions to it.

Experience has shown that a most useful class of officers was authorized by the Act relative to Medical Storekeepers.

The number now authorized is too small. They could very properly perform the duties of medical purveyors, now performed by medical officers, and thus officers who have been educated with special reference to service as physicians and surgeons, and who are now acting as medical purveyors, would be enabled to resume their proper duties. I therefore recommend an addition to the medical storekeepers.

At present the washing of clothes in General Hospitals is provided for as follows: One matron is provided for every twenty patients, who receives a compensation of six dollars per month and one ration. Great difficulty is experienced in large General Hospitals in procuring a sufficient number of matrons to perform this duty, and I have the honor to propose that, instead of this now unreliable plan, a sum of money, equivalent to the pay and allowance of a matron, say twelve dollars for every twenty patients, be monthly allowed to every General Hospital, to be appropriated for laundry purposes at the discretion of the Surgeon in charge, whether to the payment of matrons or the payment of bills for washing by steam or otherwise.

The 10th Section of the Act approved July 17, 1862, gives additional rank to officers of the Adjutant Generals, Quartermasters, Subsistence, and Inspector Generals Department who are serving on the Staff of Commanders of Army Corps. There is, I think, manifest propriety in extending the provisions of this Act to the officers of the medical department who may be on duty with such command as medical directors, and I respectfully ask for such extension.

The Engineer and Ordnance Departments are charged with the erection of buildings which requires special knowledge. The building of hospitals also requires knowledge of a peculiar character, which is not ordinarily possessed by officers out of the medical department. It would therefore appear obviously proper that the medical department should be charged with the duty of building the hospitals which it is their duty to administer.

In the matter of transportation the interests of the service require that the medical department should be independent. Much suffering has been caused by the impossibility of furnishing supplies to the wounded, when those supplies were within a few miles of them in great abundance.

The establishment of a laboratory, from which the medical department could draw its supplies of chemical and pharmaceutical preparations, similar to that now so successfully carried on by the medical department of the Navy, would be a measure of great utility and economy. I therefore respectfully recommend that authority be given for this purpose.

In regard to the age at which recruits are received into service a change is imperatively demanded, both for the interest of the Army and the welfare of individuals. The minimum is now fixed at eighteen years, and it is not uncommon to find soldiers of sixteen years old. Youths of these ages are not developed, and are not fit to endure the fatigues and deprivations of military life. They soon break down, become sick, and are thrown upon the hospitals. As a measure of economy I recommend that the service age of recruits be fixed by law at twenty years.

The present manner of supporting the cartridge-box is productive of hernia or rupture. Many instances in support of this statement have occurred since the commencement of the rebellion, and reports on the subject are frequently received from medical officers. I recommend that, instead of being carried by a belt around the waist, the cartridge-box be supported by a shoulder-strap. This would entirely obviate the evil.

At the last session of Congress the sum of two millions of dollars was appropriated for the relief of discharged soldiers. I recommend that one million of dollars of this sum be set aside for the establishment of a permanent home for those who have been disabled in their country's service. This measure is one of such importance that I forbear entering into details at this early period. An establishment of the kind organized upon an approved plan would be productive of incalculable benefit.

Soon after my appointment I issued circulars to medical officers, inviting them to co-operate in furnishing materials for a Medical and Surgical History of the Rebellion. A large number of memoirs and reports of great interest to medical science, and military surgery especially, have been collected, and are now being systematically arranged. The greatest interest is felt in this labor by the medical officers of the Army and physicians at large.

The reorganization of the Medical Department necessitated a new set of regulations for its guidance. Under your orders a Board has been in session preparing a new code. Their labors have been very much interfered with by the necessity of detailing them, from time to time, for more imperative duties, but I expect to be able to submit to you, in a short time, a complete set of regulations for your approval.

I have deemed it my duty, with your sanction, to visit, from time to time, the hospitals and armies of the eastern portion of the country. I have thus been enabled to make myself acquainted with their sanitary condition and medical wants. I hope, ere long, to be able to extend these inspections to the west.

A uniform diet table for General Hospitals has been prepared with great care, and promises to work advantageously.

Large depôts of medical supplies have been established at New York, Philadelphia, Baltimore, Fortress Monroe, Washington, Cincinnati, Cairo, St. Louis, and Nashville, which have proved of incalculable advantage to the sick and wounded. Moreover, large sums have been saved by the accumulation of stores before the recent advance took place.

In terminating my report, I desire to express the hope that the labors of the Officers of the Medical Department may be made more and more worthy of the high mission which has been confided to them.

I am, Sir, very respectfully, your obt. servt.,

WILLIAM A. HAMMOND,
Surgeon-General.

HON. E. M. STANTON,
Secretary of War.

GENERAL ORDERS.—No. 36.

WAR DEPARTMENT, ADJUTANT GENERAL'S OFFICE,
WASHINGTON, April 7, 1862

1. The General Hospitals are under the direction of the Surgeon-General. Orders not involving expense of transportation may be given by him to transfer Medical Officers or Hospital Stewards from one General Hospital to another, as he may deem best for the service.

2. The Chief Medical Officer to whom the charge of all the General Hospitals in a city may be intrusted, will cause certificates of disability to be made out for such men as, in his judgment, should be discharged. He will be responsible that the certificates are given for good cause, and that they are made in proper form, giving such medical description of the cases, with the degree of disability, as may enable the Pension Office to decide on any claim to pension which may be based upon them. The certificates of disability will be signed by the Chief Medical Officer and forwarded by him to the Military Commander in the city, who shall have authority to order the discharge and dispose of the case according to existing regulations.

3. The final statements, and all the discharge papers, will be made out under the supervision of the Military Commander, and signed by him. Where the men are provided with their descriptive rolls there will be no delay in discharging them after their certificates of disability are acted on. But if they have no descriptive rolls, application will be made to the Company Commander for the proper discharge papers, and the men may be maintained at the hospital a reasonable time while awaiting them, to avoid their being turned off without means of support. The

discharge will, in all cases, bear the date when the papers are actually furnished to the soldier.

4. When a man is received in any hospital without his descriptive roll, the fact will be immediately reported by the Medical Officer in charge to the Military Commander, who will at once call on the Company Commander, in the name of the Secretary of War, promptly to furnish the military history of the man, and his clothing, money, and other accounts with the Government.

5. When too long a delay would arise in discharging the man because of the remote station of his company, application will be made by the Medical Officer to the Adjutant General for such account of the man as his records will furnish. To this partial descriptive roll the Medical Officer will add the period for which pay is due the man since his entry into the hospital. The man will then be discharged and receive the pay and travelling allowances thus shown to be due him, leaving the balance due him on account of clothing, retained pay, &c., for settlement in such manner as may hereafter be determined.

6. The Military Commander's duties, in reference to all troops and enlisted men who happen to come within the limits of his command, will be precisely those of a commanding officer of a military post.

7. It is made the duty of each Military Commander to correct, as far as may be in his power, the evils and irregularities arising from the peculiar state of the service at this time, by collecting stragglers and sending them forward to their proper stations, or discharging them on certificates of disability, if, on examination by the Chief Medical Officer, they be found unfit for the service.

8. The Military Commander in each city will have control of such guards as may be furnished to preserve discipline and good order at the several military hospitals. He will advise the Adjutant General of the Army what number of companies will be required for such guards. He will cause them to be properly posted, relieved, and instructed.

9. Whenever the Chief Medical Officer shall report a number of patients as fit to join their Regiments, the Military Commander will give the necessary orders to have them forwarded in good order and under suitable conduct.

10. The chief Medical Officer in each city is authorized to employ as cooks, nurses, and attendants, any convalescent, wounded, or feeble men, who can perform such duties, instead of giving them discharges.

11. All officers and enlisted men of Volunteers who are on parole not to serve against the rebels, will be considered on leave of absence, until notified of their exchange or discharge. They will immediately report their address to the Governors of their States, who will be duly informed from this office as to their exchange or discharge.

12. The duties of Military Commander, as above defined, will devolve, *in the District of Columbia*, on the Military Governor; *in the City of Baltimore*, on the Commander of the Middle Department; *in the City of Philadelphia*, on Lieutenant Colonel H. Brooks, 2d Artillery, hereby assigned to that station; *in the City of New York*, and the military posts in that vicinity, on Brevet Brigadier-General H. Brown, Colonel 5th United States Artillery.

By order of the Secretary of War.

L. Thomas, Adjutant General.

Adjutant General's Office,
August 26, 1862.

Note to Par. 5:

"In cases where too long a delay would arise in discharging a man because of the remote station of his Company," and when no descriptive list, or partial descriptive list, can be obtained from this office, the men referred to will be discharged under this order, and an order given them on the Quartermaster's Department for transportation to their homes. This order will be signed by the same officer who signs the discharge. The Quartermaster's Department will furnish transportation to such men, upon the presentation of this order, requiring them also to show their discharge.

By order of Major General Halleck.

E. D. Townsend, Assistant Adjutant-General.

Note 2d to Par. 5:

The sentence "To this partial descriptive roll the Medical Officer will add the period for which pay is due the man since his entry into the hospital," will be understood to give him pay *on this final statement* from the muster *next preceding* his entry into the hospital until the date of his discharge.

Official:

Assistant Adjutant General.

Changes, etc., during the Week.—Leave of absence has been granted to following named medical officers on surgeon's certificate of disability.

Ass't Surgeon T. C. Wallace, 93d New York Vols., for twenty days.

Surgeon A. P. Dalrymple, U. S. Vols., for thirty days.

Surgeon J. T. Webb, 23d Ohio Vols., for twenty days.

Leave of absence for thirty days has been granted Ass't Surgeon G. H. Knapp, 61st Illinois Vols., subject to the approval of the Commanding Officer, Department of the Tennessee.

Ass't Surgeon John S. Pashey, 51st Illinois Vols., has been mustered out of service for absence without leave.

Surgeon N. F. Marsh, 4th Pennsylvania Cavalry, has been honorably discharged the service of the United States, on account of disability.

Surgeon G. L. Pancoast, U. S. Vols., has been assigned to duty as Medical Director, 8d Army Corps.

Surgeon J. B. Peale, U. S. Vols., as Acting Medical Inspector, 11th Army Corps.

Surgeon A. C. Hamlin, U. S. Vols., as Medical Director, 11th Army Corps, relieving Surgeon George Rex, U. S. Vols., who has reported to the Surgeon General in person for duty.

Surgeon G. D. Beebe, U. S. Vols., as Medical Director of the Centre, Army of the Cumberland.

Surgeon Howard Culbertson, U. S. Vols., to duty in charge of General Hospital, Rolla, Mo.

Surgeon C. McDermont, U. S. Vols., as Medical Director, Right Wing, Army of the Cumberland.

Surgeon G. M. Kellogg, U. S. Vols., as Medical Director, 2d Kanawha District, Ganley, Va.

Surgeon E. F. Sanger, U. S. A., to duty at Fort Jackson, La.

Dr. John D. Johnson, to duty at the Newton University, Baltimore, Md.

Surgeon C. W. Jones, U. S. Vols., has been relieved from duty in the Medical Director's Office, Baltimore, Md.

Ass't Surgeon J. S. Watts, 4th Michigan Vols., has been ordered to rejoin his regiment without delay.

Ass't Surgeon Warren Webster, U. S. A., has been placed on duty in the Office of the Medical Director of the Army of the Potomac.

Ass't Surgeon G. L. Porter, U. S. A., to duty with the 5th U. S. Cavalry.

Ass't Surgeon L. M. Eastman, U. S. A., to duty with the 1st U. S. Cavalry.

Ass't Surgeon Samuel Adams, U. S. A., to duty with 8th U. S. Infantry.

The General Hospital at Corinth, Miss., was discontinued on the 3d inst., and that at Iuka on the 12th inst. These Hospitals were under charge of Surgeon Norman Gay, U. S. Vols., and occupied by wounded Confederate prisoners, who were transferred to Lagrange, Tenn.

The Surgeon-General returned on the 18th inst. from Philadelphia, Pa., where he was on duty connected with the Purveying Department.

Medical News.

RESOLUTIONS ON THE DEATH OF DR. FRANCIS R. LYMAN.

Harewood Hospital, Nov. 14, 1862.

At a meeting of the medical officers of this hospital—Act. Assist. Surgeon N. C. Stevens, Prest., Act. Assist. Surgeon M. A. Hanly, Sec.—Act. Assist. Surgeons Dorsey, Bowen, and Olden were appointed a Committee to draft resolutions expressing regret at the decease of our late associate Act. Assist. Surgeon F. R. Lyman, of Chenango county, New York.

Whereas, It has pleased Almighty God, in his inscrutable wisdom, to remove from our midst our much esteemed colleague, Act. Assist. Surgeon Lyman: therefore—

Resolved, That in the vacancy caused in the Medical Corps of this Hospital by his death, the said Corps has lost one of its most efficient officers, both professionally and executively, and one whose courteous demeanor was highly appreciated by his medical associates.

Resolved, That we, the Medical Officers of this Hospital, deeply sympathize with his relatives in their affliction, and express our regret at his removal by death.

Resolved, That a copy of these Resolutions be sent to his family, and that they be published in the American Medical Times, and the *Chenango Courier*.

N. C. Stevens, *President*.
M. Abbott Hanly, *Secretary*.

Original Lectures.

LECTURES ON MILITARY SURGERY,

DELIVERED AT THE

COLLEGE OF PHYSICIANS AND SURGEONS, N. Y.

By WILLIAM DETMOLD, M.D.,

PROFESSOR OF MILITARY SURGERY AND HYGIENE.

LECTURE II.

General Remarks on Wounds.

GENTLEMEN:—Before we consider the wounds of the different parts of the body, and the regimental surgeon's duties with regard to them—for, bear in mind, we have not yet arrived at the treatment of the wounded, we still have under consideration your duty on the battle-field—I say, before we come to the wounds of the different parts, we have a few remarks yet to make which refer equally to all wounds.

1. *Primary Hæmorrhage.*—Where you have a wound from which life is rapidly ebbing away, of course no time is to be lost to arrest it. Fortunately the cases are rare; if they do occur the best is to enlarge the wounds, and tie both ends of the wounded artery; the next best is to tie the artery as nearly as possible above the wound, where the anatomical relations are not disturbed by the wound, and the artery therefore is easier found; in the upper extremity this procedure promises less on account of the fewer anastomoses than in the lower. If in consequence of much laceration it is difficult to get at the artery, or if you are not confident to undertake such an operation under the circumstances, then put a thick compress over the wound, and apply a roller around the limb; you will thus fill the wound with coagulated blood, and stop the opening in the bleeding vessel; you may then apply a tourniquet loosely between the wound and the heart, with directions to tighten it if hæmorrhage should recur in the ambulance wagon; if the man is able, you may advise him to assist by gentle pressure of his own hand over the wound. You should also be careful not to place such a limb in a dependent position, but elevate it as much as you can conveniently to the patient.

2. *Collapse.*—Many wounded, especially those who have been struck by heavy missiles, cannon balls, or pieces of shell, will be brought in in a state of collapse from the shock. Let them be laid down with the head not much elevated, cover them up warm, give them hot drinks, if any are on hand, and give them brandy or whiskey; as soon as they have recovered from the shock, if any operative interference is necessary, administer chloroform, which experience has shown to be well borne by those recovering from collapse, its action being rather stimulating, only observe the precaution that it is advisable in these cases not to carry anæsthesia to the full extent.

3. *Pain.*—It is remarkable that men struck down in battle rarely suffer much pain at first. The excitement of the moment, the rapidity with which the injury is inflicted, and the crushing transit of the missile through the parts, which lowers or destroys innervation, may explain the frequent absence of pain. Yet there are exceptions to this rule, and you will occasionally encounter wounded in a high state of nervous excitement and exaltation, who complain of the most acute and exquisite pain, much more than under ordinary circumstances such a wound would lead you to suppose. This may arise, as I have said just now, from an excited and exalted state of the nervous system, or may be from the laceration and irritation of some nerve fibres by a splinter of bone or some other foreign body. In these cases it is best to allay the excitement by a full dose of morphine, 10 or 15 drops of Majendie's solution, and the pain by sprinkling gr. ¼ or gr. j. of morphine directly into the wound, which will in most cases act like a charm, allaying the pain immediately; yet where the excessive pain depends upon the irritation of some lacerated nerve fibre, this relief may be only temporary. You should therefore furnish a little dry morphine to the attendant on the ambulance, with direction to repeat the local application if required.

4. *Examination of the Wound.*—The wounds must first be cleaned of dirt or dust which may have got into them in falling, then a gentle examination should be made with the finger to feel for the bullet or other foreign substances, such as pieces of cloth, pieces of accoutrement, or loose splinters of bone, all of which, if it can be done with ease, should be removed, but only when, as I say, it can be done with ease. Do not poke and probe too much in the wound. Especially let me warn you against the use of the ordinary fine silver probe, where the wound is too deep to reach the bottom with the finger. Let me recommend to you the use of a full sized leaden bougie. That is the best probe for gunshot wounds, and upon my advice Mr. Tiemann puts it now into all his army cases. Examine the clothing where the ball has passed through to see whether it is simply perforated, or whether pieces have been, as it were, punched out. Do not throw away any part of the clothing, but send it with the wounded to the hospital, because a careful examination of it may, in many cases, throw much light upon the character of the injury.

Lastly, it is very desirable that you should write down the result of your examination, and an account of what you have been doing, and let it go with the wounded; it will be an important guide to the surgeon who afterwards takes charge of the case, and it is a record of the manner in which you have fulfilled your duties, which will give your superiors a measure of your ability, and will be the best claim to promotion.

Wounds of the Head.—We sometimes meet with large scalp wounds, either from a sabre cut or a passing heavy projectile, large flaps of the scalp being detached; in these cases do not cut away the flap, even if it is only connected by a narrow bridge. First of all, it is the best covering you can put on the denuded bone; and secondly, because on account of the vigorous innervation and circulation in the parts, these almost detached flaps will in most instances adhere again; but do not fasten the flap with many sutures, because in the aponeurotic tissues of the scalp they increase the chances of erysipelatous inflammation. To prevent the flap from contracting and curling up, you may put one or two stitches in the angles, but these stitches must only pass through the cutis, and not through the galea. If the bones of the skull are fractured, and the ball has penetrated into the substance of the brain, make a careful investigation with the finger, but do not poke much about in the brain, and remove only such splinters as are quite loose. It is astonishing what little disturbance of any kind often a ball in the brain will produce; the men will not believe they are hit, they think they have stumbled and hurt themselves in falling. I saw at one of the hospitals at Fortress Monroe a man who had a round hole in the middle of the left side of the os frontis; he was walking about the hospital, had a good appetite, and was well and cheerful; he insisted that the ball had not penetrated, but had fallen out again into his hand, and that he threw it away. After a few days he began to complain of headache, became heavy, and at last comatose; the wound was examined, and a large ball extracted from the anterior lobe of the brain, which, at the post-mortem examination, was found to be very extensively disorganized. I do not believe the man would have lived as long as he did, if the ball had been extracted at once. If you put a man with a ball in the brain in an ambulance wagon, you must give special instruction to the driver to drive carefully. Stromeyer relates cases where such, being apparently quite well, were seized with violent convulsions as soon as the ambulance moved off—probably in consequence of the displacement of the heavy ball in the soft brain substance.

Apply a simple bandage to the head. I have seen in the French medical field chests a supply of six nightcaps for the purpose. Now, first, I do not like the idea of nightcaps, and then the military surgeon should not accustom himself to depend upon such ready-made bandages. You can make

a better and simpler bandage by taking a piece of muslin 30 inches by 14, tear lengthwise on each side, and on each end a strip of 2 inches wide to within 3 inches of the middle; then bring the two wide middle flaps under the chin, and the four narrow outside ones around the head, two from behind forwards, and the other two from the front backwards. (The Professor then showed the class the application of this bandage.)

In Wounds of the Face you should remove no splinters of bone, unless easily detached; it is better to let them come away by suppuration, because then the periosteum is preserved, and the subsequent deformity less.

In Wounds of the Neck it is very desirable to remove the ball at once, because it is very apt to travel through the loose cellular tissue, along the course of the muscles, and lodge either upon the apex of the pleura or descend into the mediastinum, and thus give rise to grave consequences.

Wounds of the Chest.—Penetrating wounds of the chest, with lesions of the thoracic organs, constitute probably the majority of the immediately fatal wounds; but where they do not prove immediately fatal, experience has shown that the prognosis is not so bad as you might be led to suppose, and as even good authorities, such as for instance Dupuytren, formerly believed; a very fair proportion of them will recover. The prognosis is much more favorable than in penetrating wounds of the abdomen with lesion of the abdominal organs. I think it is quite as good as in gunshot wounds, with fracture in the knee-joint, or fracture of the femur.

Penetrating Chest Wounds are generally accompanied by severe shock, great difficulty of breathing, spitting of blood, and the passage of air through the wound; they are exceedingly perplexing to the surgeon, and call for the coolest exercise of good judgment. Make careful digital examination, and remove all splinters and other foreign substances. If part of the lung protrudes—which, however, is rare, as in most cases the lung collapses, but if it does—reduce it; it has been advised not to reduce it further than the level of the ribs, so as to let it close the wound—but I think that is putting rather too fine a point on it. The most important question is with regard to closing the wound, and authors do not agree on this point. The rules which must guide you, however, are simple:—If there is no outward hæmorrhage, and you ascertain by percussion that there is no internal hæmorrhage into the sac of the pleura, but if there is much difficulty of breathing, then close the wound as firmly as you can; but if there is hæmorrhage, leave the wound open to prevent the collection of blood in the pleural sac, which may threaten suffocation; if, however, on the other hand, the hæmorrhage is so profuse as to threaten immediate fatal consequences, then, again, you must run the risk of suffocation, close the wound, let the blood accumulate in the pleural sac, and give your patient the chance of having the hæmorrhage arrested by the pressure of the accumulated blood.

Ovariotomy may be truly said to be the operation on the order of the day. Mr. S. Wells, on showing some ovarian tumors at the Pathological Society, remarked that "although last session he reported twelve cases with seven deaths, he could now say that, reckoning the above recent cases, the last nine were successful operations." On the 15th Oct., Mr. Bryant removed a large ovarian cyst from a woman in Guy's Hospital. The patient has, we understand, gone on well to a recovery, no bad symptom having appeared. Another operation of this nature has been performed at St. Bartholomew's, and one some few weeks ago at St. George's hospital. In France, also, in all quarters, ovariotomists are springing up. Dr. Lee, in his forthcoming paper at the Medico-Chirurgical Society, will, we doubt not, blow a counterblast to the proceeding; but one which, in the present mind of the profession, will be as unavailing as was the trumpet of King James against the smoking of tobacco.—*Brit. Med. Jour.*

Original Communications.

CASE OF LIGATION OF THE SUBCLAVIAN ARTERY.

By HANFORD N. BENNETT, M.D.,
OF BRIDGEPORT, CONN.

A young man, 20 years of age, residing in the town of Stratford, while playing with a lad, was accidentally stabbed with a long narrow knife, the point of which entered upon the posterior and outer face of the left arm, a short distance above the insertion of the deltoid, passing directly upwards and inwards, a distance of at least three inches, the edge of the knife being turned towards and running close upon the bone. My friend, Dr. James Baldwin, of Stratford, was immediately called, as the hæmorrhage was profuse. Upon his arrival the patient was already faint from loss of blood, and it was not difficult at this time to arrest the bleeding. A roller was very judiciously applied the whole length of the limb, and a firm compress over the wound. This precaution was taken as the blood appeared to be arterial, and Dr. Baldwin is quite positive that at this time there was no pulsation in the radial artery, leading him to suspect that this vessel was wounded. The hæmorrhage remained quiescent several days, when it again broke out with renewed force, and unmistakably arterial. At this stage of the case I first saw the patient. The whole limb was now swollen, the arm being to a considerable extent infiltrated with blood, while the forearm and hand were œdematous. I proposed, before resorting to operative procedures, to try the application of persulphate of iron, which was approved by the attending physician, and the wound was filled with this powerful styptic—compression being continued as before. The hæmorrhage had now another period of quiescence, and the swelling of the limb materially lessened, but upon the eighth day after the application of the styptic, bleeding again commenced, with still greater violence, and was with much difficulty arrested by compression. The limb immediately swelled again, and the œdema of the forearm and hand was greater than before. The patient was now suffering the constitutional effects of loss of blood—his face was blanched, his appetite poor, and his pulse frequent and feeble. I believed it high time to secure the patient from further hæmorrhage, if possible, and with this view proposed to ligate the subclavian artery. An attempt to tie the wounded vessel by following the incision (only three-fourths of an inch in width), would involve the muscles of the arm to an unwarrantable extent, and perhaps also important nerves. It was quite uncertain as to what artery had been severed or *wounded*, and the anastomoses about the shoulder being quite free, I believed the ligation of the subclavian to be the most judicious method of treatment. I was not aware, either theoretically or *practically*, that the ligation of arteries at a distance from the seat of the wound, sometimes fails, the hæmorrhage returning after a longer or shorter period; but this fact seemed to me to indicate the tying of the artery at that point which would most effectually restrain the circulation.

I proceeded to the operation (Oct. 12, 1862), assisted by Dr. Baldwin. No details are necessary, as the vessel was tied in the usual manner and place, just without the scaleni muscles. The infiltration of blood and the œdema disappeared almost entirely within forty-eight hours, and the temperature of the limb was easily maintained by an envelope of flannel. The ligature came off on the thirteenth day, the operative incision being nearly healed. The original wound also began to cicatrize, and was firmly closed at the end of three weeks after the operation. No pulsation is yet visible in the radial or ulnar arteries, although the man is in good health, and pursuing his ordinary avocation.

Nov. 8, 1862.

NEURALGIA

TREATED BY ENORMOUS DOSES OF SULPHATE OF MORPHINE.

By T. B. TOWNSEND, M.D.,

OF NEW HAVEN, CONN.

In the month of August, 1861, a patient presented himself under the following circumstances:

The patient was 5 feet 10 inches in height, weighed 200 lbs., muscular system in a perfectly normal condition. Alimentary canal performing its functions naturally and regularly.

Notwithstanding this plethoric and robust condition of body, he suffered from an intense pain in the region of the left shoulder, extending down the arm, and dating back about four weeks to its commencement.

Since early childhood he has been in the enjoyment of perfect health, and even at the first visit, although I made a careful examination of his case "cap-à-pie," nothing of an abnormal nature could be detected, aside from a natural depression, resulting from the severe pain and disturbed rest. Neuralgia suggested itself, and a subsequent train of symptoms has without doubt substantiated the diagnosis.

The excessive and almost continued pain, with its natural interference with sleep, had for the four weeks previous to his visit reduced his weight from 215lbs. to 200lbs. Having employed the sulphate of morphine in several cases of neuralgia hypodermically with complete success, I had no hesitation in administering it immediately.

The one-eighth of a grain thrown under the skin produced no perceptible effect; but when increased from one-half to one grain the pain immediately subsided, and the arm, which was powerless before the introduction, was able to perform its proper functions wholly unimpaired, during a period of 24 hours.

Upon a recurrence of the pain a reintroduction was necessitated, followed by the entire disappearance of the neuralgia. The appetite, which was slightly impaired, returned, and the system generally recuperated, and thus the case continued for about four months, the injections not exceeding five grains of morphine in the twenty-four hours.

During this period of four months the sulphate of quinine in large doses, the salts of iron, arsenic, iodide, potass, strychnia, stramonium, cannabis indica, ammonia muriatis, etc. etc., were employed, but without any perceptible benefit. In fact, the treatment included illustrations from all the different classes of remedial agents found in the Materia Medica. Up to January, 1862, the neuralgia had been confined mostly to the left shoulder and arm, but at this time a marked change occurred. The pain became more excessive, and extended down the side to the lower extremities, across the abdomen and chest, affecting not only the muscles of the chest, but those of the bronchial tubes, producing strongly marked paroxysms of asthma.

On account of the locality of the disease and its exaggeration, it was necessary to increase the dose to six grains daily, and at last after three convulsions, which lasted about half an hour each, during which time the functions of the sensorium were greatly perverted, and almost entirely suspended, it was necessary to increase to eight grains in the twenty-four hours.

Previous to January, 1862, he has not been confined to the house even for a day, but during the attack connected with the convulsions he was obliged to remain in bed for six weeks.

From the commencement of the disease and throughout its course, there has been no inflammatory action and no symptomatic fever.

In the neighborhood of March 1, 1862, the neuralgia left the limbs and located itself in the diaphragm and back, affecting the muscles of the bronchi but slightly. The contractions of the diaphragm were so violent as to cause the abdomen to assume the dimensions of a female at the sixth month, which subsided immediately after the injection of the morphine, leaving it soft, flat, and normal. The contractions have produced an umbilical hernia (although there was no predisposition), which has attained the size of a hen's egg. Up to the present July, 1862, we find him in the following condition, viz. general health fair, weight 160 lbs., appetite good, pain comparatively slight, and when free from it, *seemingly nearly* as well as ever. The injections are continued once or twice daily, averaging ten grains in the twenty-four hours.

Near the middle of August, 1862, a permanent enlargement of the abdomen was noticed, which gradually increased until November, 1862, when, after failing with the diuretics, hydragogue cathartics, and other agents usually employed, I drew off sixteen quarts of serum of the usual characteristics found in ascites.

This occasioned great relief, and mitigated all the distressing symptoms to such an extent, that he was able to walk out with the aid of an assistant.

His condition Nov. 20, 1862, much emaciation, weight 140 lbs., return of ascites, occasioning pain from pressure. Appetite good, sleeps poorly, pulse weak, constipation, confined to bed, pain of neuralgia excessive, but suppressed by the morphine, of which he takes daily from twenty-five to thirty-five grains, seldom less.

December 2, 1862.—I re-performed the operation of paracentesis abdominis, and drew off about eighteen quarts of serum, of the ordinary character.

This I was prompted to do in order to palliate the extreme dyspnœa, although he was in a very depressed condition. The breathing was relieved, but the pain, which was located in the back, continued. He gradually sank, becoming comatose, and death terminated his horrible sufferings on the fourth instant.

The greatest amount of morphine given in the twenty-four hours, when the suffering was the most acute, was over fifty grains (the morphine being of the first quality). When any attempt (unknown to the patient) was made to reduce the dose, it failed to control the pain, and I have been obliged to gradually increase the strength until (as before stated) over fifty grains have been administered in the course of a day, and that without producing any marked symptoms of narcotism.

The amount of morphine taken during the treatment, extending over sixteen months, is almost fabulous; five thousand grains would not exaggerate it. It never failed to relieve the pain and spasm of the muscles; the latter being often so severe of the recti-abdominalæ, as to assimilate the emprosthotomos of tetanus. The muscular fibres between the lineæ transversæ were so firmly contracted as to form distinct hard tumors the size of a hen's egg. No effect was noticed as attributable to the morphine, with the exception of the immediate and total subsidence of the neuralgia. He had never taken any of the salts of morphia, or preparations of opium, before he was attacked by this malady, and his system gave no evidence of an habitual use of alcoholic stimulants. The appetite continued good throughout the course of the disease, perhaps accountable to the fact that no morphine was taken into the stomach. This case furnishes many valuable points of interest:

1. It illustrates a most formidable and obstinate instance of the disease with which we are obliged to contend. 2. The great tolerance of the system to morphine, and the immense quantity which was given in so brief a time, without perceptibly producing other than a transient effect upon the physical economy. 3. The almost uniform effect of the morphine under all circumstances, and without regard to the parts selected for its administration (for it was injected into almost every region of the body), and the excessive tonic spasms of the diaphragm and recti muscles.

SERJEANT-SURGEON TO THE QUEEN.—The Queen has been pleased to appoint Cæsar Henry Hawkins, Esq., F.R.S., to be one of Her Majesty's Serjeant-Surgeons in Ordinary, in the room of Sir Benjamin Collins Brodie, Bart., deceased; and James Moncrieff Arnott, Esq., F.R.S., and Richard Quain, Esq., F.R.S., to be Surgeons Extraordinary to Her Majesty.— *Lancet.*

Reports of Hospitals.

CASES AT THE NEW YORK EYE INFIRMARY.

BY HENRY D. NOYES, M.D.

STRABISMUS DIVERGENS : CURED BY BRINGING FORWARD THE RECTUS INTERNUS MUSCLE.—LAGOPHTHALMUS.—ECTROPIUM BY SPASM OF ORBICULARIS.

I.—*Strabismus Divergens; bringing forward of Rectus Internus Muscle.*—John D., Engineer, æt. 25. In early life had *converging* strabismus, and for its relief the internal rectus muscle of the right eye was divided twelve years ago. The operation was not performed as carefully as modern surgery teaches us to do it, and the result was a squint in the opposite direction. The eye rolls outwards so far as to justify the appellation of "luscitas oculi." It appears that the muscle was cut twice by the surgeon, in one week; the first operation being insufficient, the second one superlative Patient has not totally lost control of the eye, but he can turn it no further than to bring the inner edge of the cornea opposite to the middle of the eyelids. The original insertion of the rectus internus is marked by a reddish elevation beneath the conjunctiva. The caruncula lachrymalis has sunk down deeply. Vision is sufficient to discern large objects, but was not accurately tested.

To correct the deformity, simple division of the external rectus was evidently inadequate, and the following operation was undertaken:—The aim of the operation was to give to the divided muscle an attachment to a part of the globe nearer to the cornea, so as to enable it to act at a greater mechanical advantage. The loss of power is due to two causes: first, that the muscle has been shortened, and secondly, that its insertion has slipped backwards. The first fault is irremediable: the way in which the second impairs the power of the muscle is evident on a moment's reflection. The normal insertion of the ocular muscles is a little in front of the equator of the globe. So long as its attachment continues to be at or in front of the equator, a muscle acting alone simply turns the eye about its centre. But where the insertion slips behind the end of the transverse diameter into the posterior quadrant of a great circle, the turning power rapidly diminishes as the sine of the arc grows shorter; at the same time the muscle tends to pull the eye back into the orbit. The muscle is further weakened by the approximation of its origin and insertion, rendering its contractions less efficient.

Operation.—Patient etherized; eyelids separated by the wire speculum. The first step was to find and dissect up the insertion of the internal rectus muscle. An incision a quarter of an inch long was made vertically through the conjunctiva, at the reddish spot above mentioned. The conjunctiva was dissected off the sclerotica, and off the external surface of the muscle, by scissors, for a depth of one-half or three-fourths of an inch. It was accidentally cut through before reaching the muscle. The insertion was sought for by a blunt hook—was found to be composed of a small bundle of fibres, not more than one-fourth the normal breadth. Seizing it with forceps it was separated from the globe and from its surrounding attachments, and loosened, until its extremity could be pulled as far forwards as the edge of the cornea. The next step was exposure of the *external* rectus muscle. A thread armed with a needle at each end was passed twice through the tendon, so that when tied it should include in the loop its whole breadth. The muscle was then severed just behind the thread. In these dissections the wounds made in the conjunctiva were as small as practicable, and the sub-conjunctival areolar tissue divided as sparingly as possible. The reason for this caution is, that the nutrition of the cornea may be perilled by the diminution of its vascular supply—nearly one-half of its blood-vessels are sacrificed at any rate.

By the thread fastened to the tendon of the external rectus, the eye could now be turned inward to the utmost degree. In doing this the divided external rectus could not slip entirely away from the globe, because its lateral attachments to the tunica vaginalis oculi had not been cut; at the same time the internal rectus applied itself to the sclerotica, very near the margin of the cornea.

To maintain this extreme inversion the thread was carried across the bridge of the nose, which was protected by a compress, and fastened by isinglass plaster upon the opposite cheek. The thread, in passing out of the eyelids, pressed upon the border of the upper lid, and to correct this another thread was attached to the middle of the first, like a guy, to pull it down, and fastened by plaster upon the right cheek. The eyelids could be shut completely, and the thread was held tense. April 20.—Patient was kept in bed for ten days, and the thread kept in situ forty-two hours. But little inflammation ensued: lids moderately swollen; external ecchymosis very extensive; general injection of the sclerotic; no chemosis, no pain. Convergence is decided; a fold of conjunctiva projects at inner canthus. Has double vision. May 12.—The redness of eye almost gone; has made use only of cold lotions. The tendon of the external rectus to which the thread was fastened, and the sclerotic into which the tendon was inserted, have sloughed. There is deep venous congestion at this spot. The cornea entirely transparent.

Patient no longer sees double, except when looking far to the right side. When looking straight before him the visual axes are parallel. There is necessarily a decided limitation in the excursion which the eye can perform, but the range of its rotation, so far as it reaches, now corresponds with the other eye. Oct. 3.—The position of the globe remains the same—its correction being perfect—but the arc of rotation is no greater. There is a slight degree of prominence of the eyeball. A black spot marks the original insertion of the external rectus. Patient is much gratified with the improvement of his appearance. Does not have diplopia.

This operation is troublesome to perform, and requires for its success great docility on the part of the patient. The thread ought to be retained in place for twenty-four hours. I kept it in longer because the patient made no complaint of it. When removed after only twelve hours, the muscle has been found to adhere firmly, but the longer the extreme inversion is kept up, the better will the new union bear the strain. There need be no fear of producing permanent converging squint. It is better that convergence should be the immediate result, because the eye will adjust itself in a little time, as the new union stretches.

The same proceeding may be used in cases of paralysis of one of the ocular muscles. The muscle must not have entirely lost its contractility, and the paralysis must be old enough to be sure that no further improvement is to be expected by natural efforts. Bringing forward the paralysed muscle enables it to act at a greater advantage, and the slight weakening of the antagonist which the operation produces, is in favor of the paralysed muscle.

(To be Continued.)

ANOTHER IMPOSTOR.—PROF. BEDFORD, of New York, writes thus to the *Bost. Jour.*:—"Letters just received from Boston notify me that an accomplished swindler, representing himself as my son, has called on several of the prominent medical gentlemen of that city, and obtained, under his base subterfuge, various sums of money. In one instance, I am informed, he asked for $20, but was requested to accept $40, which he did without compunction. About six months since, an individual of gentlemanly bearing, assuming to be the son of a distinguished professor of Boston, did me the honor of a visit—said he had just arrived from Washington on his way home, was robbed of his purse, and was without the means to take him to Boston. Without hesitation, I gave him the necessary aid, from which no doubt he took comfort. I believe, from what I can learn, that this is the same 'son,' who claims a double paternal ancestry."

American Medical Times.

SATURDAY, DECEMBER 27, 1862.

EVENTS OF 1862.

Our national history of the current year presents some points of special interest to the profession, and it is fitting that in this concluding number for 1862 we should briefly pass its more important medical events in review.

The civil war, which rages with undiminished violence, has, during the past year, made still further draughts upon the profession. The addition of another assistant surgeon to each regiment drew largely upon the young practitioners of the country, but the corps was promptly filled with, in general, well qualified surgeons. The subsequent immense increase of the army, demanding three surgeons to each regiment, has called from civil life another, and, we believe, a still more competent class of surgeons. This last demand was as promptly complied with as the former, and to-day the entire Army has as thoroughly an appointed medical corps as any army of modern times. The Surgeon-General does the medical staff but simple justice when he commends it for its efficiency.

During the past year our military hospitals have gradually increased in number and extent, until they form a grand and imposing system such as has never before been witnessed. The aggregate of sick is now never below 50,000 and has reached the enormous figure of 90,000. These hospitals are under the immediate supervision of the Surgeon-General, and are gradually becoming perfected in all their arrangements, so as to present a uniform system of management.

The Sanitary Commission, the development and direction of which our profession may justly claim, has greatly increased its means of usefulness, and has correspondingly enlarged its sphere of duties during the past year. The munificent donations to its funds of the citizens of California, amounting in the aggregate to half a million of dollars, has contributed, in connexion with its other sources of supply, to render it as effective in all its operations, as any arm of the public service. Its charities have been extended to the remotest and most obscure soldier, whether in the field or hospital. It is the first to scent the battle afar off, and with that flexibility and alacrity which characterizes true and unrestrained charity, it has been the first to raise the stricken soldier, to bind up his wounds, and administer reviving draughts. During the whole eventful campaign of the Peninsula, the Commission was foremost in supplying necessaries to the sick and wounded, and in transporting them to their proper destination. In all the sanguinary battles in the West, its agents were first on the field, and with abundant stores relieved the immediate suffering. In addition to the former labors of the Commission, it has now undertaken a system of hospital inspection which is resulting in far more thorough hospital management. Old abuses are being reformed, incompetent officers are being sifted from the service, and vigilance is now apparent in every department of our hospitals. The Directory of Hospitals, which we noticed a week or two since, is one of the most recent acts of the Commission, and is a great public convenience. In a number of ways which we need not mention, this great almoner of public charity is still extending its usefulness. If war shall be the business of the coming year, we trust the Sanitary Commission will be as liberally sustained as during the past.

The re-organization of the Medical Department of the army was happily effected in the early part of the year, and the good results have been incalculable. The important precedent is now firmly established, that its chief officer shall be selected on account of merit and qualifications, and not on the score of his age. The vigor and efficiency which General Hammond has infused into every branch of the medical service are sufficient evidence that this was a vital element of the reform sought. The Medical Staff also gained rank, which has given it a more respectable, as well as commanding position. Finally, not only has the Staff been increased, and thus rendered more nearly adequate to the service, but the important department of sanitary inspection was organized with a corps of inspectors comprising some of the most experienced medical officers in the service. This bureau, under the direction of Col. Perley, has, we learn, "been productive of excellent results." We must not omit to mention the higher grade of educational qualification which the Surgeon-General now demands of the candidates for appointment in the staff. No incompetent person can pass the ordeal which is now established, and few will be disposed to make the attempt. It is apparent, therefore, that the reform in the Medical Department of the army is an important event in the medical history of the year. Hereafter it will annually take a higher and still higher rank, and will yet be recognised and appreciated as one of the most important branches of the public service.

It would be pleasant to extend to our "Southern brethren" the courtesies of the season, and learn the state of the medical sciences in that tabooed region yclept "the Southern Confederacy." But the land and water blockade is so effectual, that we are as ignorant of the medical affairs of C. S. A. as of Japan. Occasionally we see an old, familiar name among army news, but it disappears for ever in the impenetrable gloom that overhangs that devoted country. We inquire in vain for its medical periodicals and its medical colleges. A London contemporary has, indeed, noticed the second edition of a work on Military Surgery, by our former correspondent, Prof. Chisholm, of Charleston, S.C., issued at Richmond. This is the only contribution to medical literature in the Southern States, of which we have any knowledge.

Since the commencement of the rebellion, with the exception of the American Medical Association, the medical societies, State and local, have exhibited commendable activity. They have all had their stated meetings, and the discussions have, in general, been unusually interesting. In our opinion, the National Association, the parent society, should have held its annual meeting, but the Committee determined otherwise. The same reasons which then influenced them to adjourn the meeting another year, still exist, and in threefold intensity.

Medical publishing has suffered even greater depression than during the preceding year. Periodical literature has been but poorly sustained, and the pressure which scarcity in paper now produces, threatens complete suspension. But few books have been issued, and those, almost without exception, have been small works on military surgery.

The Medical Schools are very well sustained, and in some instances largely increased classes have been the result of the demand which the army and navy are now constantly making upon the profession.

The *Necrological Record* embraces many well known names in the profession. Bell of Mass., Cooper of Cal., Sanborn of Vt., White, and many others of the army, deserve the most honorable mention.

THE WEEK.

We are glad to learn from various sources, that at the recent battle of Fredericksburg, the ambulance and hospital arrangements of Dr. Letterman, Medical Director, were admirably carried out, and resulted in the prompt succor of the wounded. The system which he devised, and which we published recently, deserves the attention of the medical directors throughout the army.

The following is Senator Wilson's bill to facilitate the discharge of disabled soldiers from the army, and the inspection of convalescent camps and hospitals:

"*Be it enacted*, That there shall be added to the present Medical Corps of the army two Medical Inspector-Generals, and eight Medical Inspectors, who shall, immediately after the passage of this act, be appointed by the President, by and with the advice and consent of the Senate, by selection from the Medical Corps of the army, or from the surgeons in the volunteer service, without regard to their rank when so selected, but with sole regard to qualification, and who shall have the rank, pay, and emoluments now authorized by law to officers of those grades.

"Sec. 2. That the officers of the Medical Inspectors' Department shall be charged, in addition to the duties now assigned to them by existing laws, with the duty of making regular and frequent inspections of all military general hospitals and convalescent camps, and shall upon each such inspection designate to the Surgeon in charge of such hospitals or camps all soldiers who may be, in their opinion, fit subjects for discharge from the service, on Surgeon's certificate of disability, or sufficiently recovered to be returned to their regiments for duty; and the medical inspecting officers are hereby empowered, under such regulations as may be hereafter established, to direct the return to duty or the discharge from the service, as the case may be, of all soldiers designated by them."

The bill has been amended in the Senate so as not to limit the selection of medical inspectors to the army.

Army Medical Intelligence.

(CIRCULAR No. 13.)

Surgeon-General's Office,
Washington, December 5, 1862.

1. The attention of medical directors is called to the numerous cases of neglect in the transmission of the Weekly Report of Hospitals, and the Monthly Report of sick and wounded.

In future they will require medical officers in charge of hospitals to forward to their office the Weekly Hospital Report, on the last day of each week; and they will promptly forward them to this office, accompanied by a list of such officers as have neglected this duty.

They will also require the Monthly Report of sick and wounded to be forwarded to them, and will transmit them to this office, duly filled up, as to date and place, and also accompanied by a list of names of those officers who may have failed to forward these required reports.

Medical directors will see that the surgeons under their direction are kept duly supplied with blank forms necessary for the above reports.

2. Medical directors having supervision of several General Hospitals, will require from the surgeon in charge of each hospital, daily report of such changes as may have taken place during the preceding day. This report will state the name, company, and regiment of each soldier admitted, returned to duty, discharged, transferred to other hospitals, died, etc., etc., and these names will, from time to time, be recorded in a book kept for that purpose in the office of the medical director.

Every facility will be afforded the agents of the Sanitary Commission, and the friends of sick and wounded soldiers, in procuring such information concerning the inmates of hospitals, as they may, from time to time, desire.

3. Surgeons in charge of General Hospitals will, upon receipt of this circular, report to the commanders of companies the names of any soldiers of their company deceased, or discharged from the service, while in their hospital, and concerning whom these reports have not been duly made.

These reports will strictly conform to paragraphs 152 and 170, General Regulations, to which, for the future, particular attention must be paid.

4. Persons detailed for duty in any capacity in General Hospitals, by medical officers in charge, without proper authority, will not be recognised at this office as hospital employés, and medical officers so employing them will be personally responsible for the wages due them.

They will also be held pecuniarily responsible for any payment over their signature made to cooks and laundresses in excess of the number authorized by regulations to the hospital under their charge.

5. Medical officers are explicitly informed that regulations on the above subjects have been written and published to be observed by them, and the various infractions which, from time to time, they have allowed themselves to make, have not been overlooked in the past, nor will be for the future.

W. A. Hammond, Surgeon-General.

Surgeon C. H. Laub, U. S. A., lately Medical Purveyor in Washington, has arrived at St. Louis, Mo., and been assigned to duty as Medical Inspector, District No. 1, Department of the West.

Ass't Surgeon Peter Cleary, U. S. V., to the camp of paroled and exchanged prisoners, Alexandria.

Ass't Surgeon S. M. Horton, U. S. A., to the 3d U. S. Cavalry, St. Louis, Mo.

Ass't Surgeon B. A. Clements, U. S. A., to duty in the Office of the Medical Director, Army of the Potomac.

Ass't Surgeons James L. Adams and A. S. Coleman, 5th Michigan Vols. and 2d Penn. Reserve Corps, respectively to report in person for duty to the Medical Director in Washington, D. C.

Ass't Surgeon E. M. Hunt, 29th N. Y. V., has been directed to rejoin his regiment immediately.

Medical Inspector L. Humphreys, U. S. A., and Assistant Surgeon Julius Brey, 25th Missouri Vols., to report in person to Assistant Surgeon-General Wood, at St. Louis, Mo.

Surgeon A. Crispell, U. S. V., has been relieved from duty as Health Officer at Hilton Head, S. C., and assigned to detachment 1st Mass. Cavalry.

Ass't Surgeon W. F. Cornick, U. S. A., has been placed on duty in Washington, D. C., as assistant to Surgeon M. Clymer, U. S. V., Attending Surgeon for officers of volunteers in the city.

Ass't Surgeon C. T. Alexander, U. S. A., has relieved Surgeon Ira Russell, U. S. V., in the supervision of the Lawson Hospital, St. Louis.

Surgeons Henry I. Churchman and Ira Russell, U. S. V., have been ordered to report to the Medical Director, Army of the Frontier.

Surgeon O. M. Bryan, U. S. V., has been placed at Los Pinos, near Peralta, N. M.

Surgeon T. G. Catlin, U. S. V., is on leave of absence at Brooklyn, N. Y., and has been directed to report to the Assistant Surgeon-General, St. Louis.

Surgeon Francis Salter, U. S. V., has been assigned to duty with General Crook, commanding 1st Kanawha Division, Western Virginia.

Ass't Surgeon C. C. Dumreicher, U. S. A., has arrived at San Francisco, Cal., en route to Camp Pickett, San Juan island.

Surgeon D. W. Hartshorn, U. S. V., has been assigned to duty as Medical Director, 1st Division, Right Wing, Army of the Tennessee, in the field.

Surgeon F. M. Heister, U. S. V., has been placed on duty as Medical Inspector, Department of the Ohio.

Ass't Surgeon A. Major, U. S. A., has taken charge of General Hospital No. 5, Frankfort, S. C.

Surgeon George Hammond, U. S. A., has been ordered to report to Assistant Adjutant-General Cresswell, to examine drafted men at the county seat of Calvert Co., Md.

Surgeon S. M. Hamilton, U. S. V., has been placed in charge of General Hospital, Gallatin, Tennessee.

INDEX.

A.

Abdomen, penetrating wound of, 120.
Address to students, 197.
Albany Medical College, 203.
Albuminuria, remarks on, 4, 18, 30, 100, 115, 128, 142, 183, 213, 227, 241, 255, 270, 282, 298, 311, 323.
Allin, Dr. C M., fracture of skull, 64.
Ambulance corps, 193, 246, 306.
Amputation 200 years ago, 210; of ankle, 315.
Aneurism of arteria innominata, 34; of internal mammary artery, cases of, 64, 65.
Ankle, amputation of the, 315.
Aniline, 172.
Ante-mortem clot, 36.
Arm, fibro-plastic tumor of, 49.
Army, medical school of British, 13; changes in medical department of, 14; fever of the, characters of, 20; the practice of surgery in the, 47; the Grand, 65; sanitary inspection in the, 93; hospitals of the, in Philadelphia, 98; of the West, sickness in the, 125; regulations for admission and promotion in the medical department of, 206; diseases in the, 265; assistant surgeons of, form of examinations of, 278; medical schools of, 262.
Arnold, Dr. E. S. F., connexion of pregnancy with rape, 297; singular case of cholera morbus, 326.
Arteria innominata, case of aneurism of, 34.
Artificial limbs, appropriations for, 67; appointment of committee on, 220.
Assistant surgeons, form of examinations for, 278; pay of, 207.
Astragalus, dislocation of, outwards, 173.

B.

Barker, Dr B. F., amputation of cervix uteri, 21; pelvic hæmatocele, 273, 259, 288.
Battle of Corinth, medical report of, 294; of Fair Oaks, medical report of, 116.
Baudens, Dr. L., review of work by, 67.
Bell, Dr. A. N., review of work by, 40.
Bellevue Hospital reports, 230.
Bellevue Medical College, 202.
Benedict, Dr. M. D., letter from, 182.
Bennet, Dr. E. P., amputation of ankle-joint, 315; letter from, 332.
Bennet, Dr. H. N., ligation of the subclavian artery, 347.
Bennet, Dr. J. H., treatment of pneumonia, 190.
Berkshire Medical Institution, 200.
Bigham, Dr. J. G., dislocation of sternal end of clavicle upwards, 300.
Bladder, case of calculus in the, 59, 258.
Bouchut, Dr., new symptom of scarlet fever, 190.
Boudin, Dr., consanguineous marriages, 108.
Briddon, Dr C. K., aneurism of arteria innominata, 34; syphilitic disease of larynx, 327; pyarthrosis, 328.
Brigade surgeons, abolition of office of, 67, 10.
Bright's disease, remarks on, 4, 18, 30, 100, 115, 128, 142, 183, 213, 227, 241, 255, 270, 282, 298, 311, 323.
Brodie, Sir Benjamin C., death of, 280.
Browne, Dr. R. K., bullet-wound exploration, 33; surgery of the war, 47; gangrene of throat, 243; resections in military surgery, 272, 286.
Buck, Dr. G., accidental breaking of catheter in urethra, 78; stricture of rectum, 78.
Bullet wound exploration, 33, 331.
Byrne, Dr. J., pelvic hæmatocele, 231, 246, 301, 315.

C.

Calculus in bladder, case of, 59, 258.
Campbell, Dr. A. B., battle of Corinth, 294.
Cancer, of intestines, 49; of bone, 260; of stomach, 261.
Cantharides, use of large doses of, 230.
Cardiac murmurs, 225, 230, 239, 253; spaces, boundaries of, 183.
Carotid artery, wound of, 339.
Catheter, breaking of in urethra, 78.
Chapin, Dr. J. B., insanity following injury of head, 62.
Cerebral hæmorrhage, cause of, 266.
Cheesman, Dr. J. C., death of, 200, 264, 294.
Cholera infantum, liver in, 160.
Cholera morbus, singular case of, 326.
Cholesteremia, characters of, 245
Cholesterine, origin of in blood, 245.
Chloroform, recent deaths under, 106; large dose of, 140; death from, 210; alleged death from, 311.
Chorea treated by whiskey, 64.
Chromhidrose, existence of, 112.
Cincinnati College of Medicine and Surgery, 204.
Clark, Dr. A., albuminuria, 4, 18, 30, 100, 115, 128, 142, 183, 213, 227, 241, 255, 258, 270, 282, 298, 311, 323; treatment of chorea, 64; exostosis of dorsal vertebræ, 64; aneurism of internal mammary, 64; cancer of stomach, 261.
Clavicle, dislocation of sternal end of, upwards, 300.
Cleveland Medical College, 204.
Clitoris, removal of, for masturbation, 9; tumor of, 340.
College of Physicians and Surgeons, 201.
Colony of Fitz-James, account of the, 249, 290.
Commissioners of health, 79.
Compressed sponge in suppression of lacteal secretion, 326.
Conant, Dr. D. C., tumor of neck, 218; tumor of side, 218.
Connolly, Dr. J. J., rectal abscess, 75.
Consanguineous marriages, facts concerning, 108.
Conscripts, surgeons for the examination of, in New York, 224; medical examination of, 192.
Corinth, medical report of battle of, 294.
Craniotomy, version as a substitute for, 192.
Croton oil, therapeutical applications of, 169.
Croup, tracheotomy in, 8, 109.
Cuyler, Dr. J. M., compliment to, 95, 97.

D.

Davies, Dr. R., wound of carotid artery, 339.
Dayton, Dr. G. A., fallopian pregnancy, 338.
Dentition and its derangements, 1, 15, 29, 43, 57, 71, 85, 99, 113, 127, 141, 155.
Detmold, Dr. W., duties of surgeon in the field, 335; general remarks on wounds, 347.
Deslandes, Dr. P. F. C., progress of medical science, 22, 37, 146, 162, 175; translations of, 60, 72, 88, 103.
Diaclastic method, case operated on by the, 297.
Diagnosis of disease of heart, 211, 225, 239, 267, 281, 295, 309.

Dialysis, report on. 157.
Diet for General Hospitals, 321.
Difficult obstetrical cases, 86, 129, 143.
Diphtheria, case of, 132.
Diseased meat in London, 111.
Dislocation of astragalus outwards, 173; sternal end of clavicle upwards 300.
Dispensary system of N. Y., benefits of the. 219.
Division Hospitals, organization of, 304, 306
Draper, Dr. J. C., medical experience at Harper's Ferry, 325.

E.

Edwards, Dr. F S., intra-uterine pessary, 8.
Elbow, resection of, 48.
Electro-magnetism as a therapeutic agent, 55; anæsthetic properties of, 221.
Elliot, Dr. G. T., cephalic version, 64; rupture of uterus, 64; Bright's disease, case of, 78; difficult obstetrical cases, 86, 129. 143; cancer of uterus, 123, 129, 143; teeth at birth, 249.
Elsberg, Dr. L., dialysis, 157.
Encysted cervical tumor, 34.
Endocarditis, physical changes in, 309.
Epidemic erysipelas, relations to puerperal fever, 60, 72, 88, 103.
Eulenberg. Dr, causes of cerebral hæmorrhage, 266.
Events of the year 1862, 351
Exomphalos, radical cure of in adult, 217.
Eye, extirpation of, 36, 108; diseases of, review of work on, 194.

F.

Fæces, stercorine in the. 245.
Fallopian pregnancy. 338.
Farnsworth, Dr. P J., effects of tobacco, 189.
Female nurses in hospitals, 149.
Fever of the peninsula, 20, 63; effects of mineral waters in the. 63.
Fevers, intermittent, new treatment for. 262.
Fibro-plastic tumor of arm, 49; of neck. 218.
Finnell, Dr. T. C., inflammation of knee joint, 36; pelvic hæmatocele, 288; strangulated hernia. 192.
Fistula in ano, treated by ligature. 105.
Flint, Dr A., ante-mortem clot, 36; simple hypertrophy of heart, 177; diagnosis of diseases of heart. 183, 211, 225, 239, 253, 267, 281, 295, 309; albuminuria, 298, 311.
Flying hospitals, 266
Foreign medical intelligence, 125. 179.
Fort Hamilton Hospital, report from, 315.
Fortress Monroe, medical affairs at, 28.
Fracture, compound of skull, 64; compound of femur, 48, 76, 120.
Funcke, Dr., stone in the bladder, 258.

G.

Gangrene of the throat, characters of. 243, 315.
Gardner, Dr. A. K., amputation of cervix uteri, 3, 16.
Garibaldi, wounds of. 210, 319.
General Hospitals, inspection of, 195.
Geneva Medical College, 203.
Gratuitous medical services, 178.
Gunshot injuries, 49.
Gunshot wound of sacrum, case of, 35; of leg, 76; arm, 76; diaphragm, 76; lungs, 77; of face, 77; of thigh, 174.

H.

Halsted, Dr T. M., dislocation of astragalus outwards, 173.
Hamilton, Dr. F. H., battle of Fair Oaks, 116.
Harper's Ferry, medical experience at, 325.
Harvard University, medical department of. 200.
Health reform, prospect of in New York, 276.
Heard, Dr. L., wounds of femoral artery, 357.
Heart, diagnosis of diseases of, 183, 211, 225, 239, 253, 267, 281, 295, 309; review of work on diseases of, 67; diseases of in Australia, 322; fatty degeneration of, diagnosis of, 281.
Hæmatocele, pelvic, 231. 246, 258, 273, 301, 315.
Hematoxylon campechianum as a deodorizer, 222.
Hernia, singular case of, 148; strangulated umbilical, 173; umbilical, radical cure of in adult, 217.
Hitchcock, Dr H. O., cases in surgery, 59.
Homberger, Dr. J., iridectomy. 32. 68.
Home for Sick and Wounded Soldiers, reports from the, 20, 35, 132.
Hospital ship Euterpe. 63, 293.
Hospital fund, uses and abuses of, 303.
Hospitals, of Nashville, 12, 109; death rate in, 38; London hospitals, diet of. 26; Mississippi, health in, 42; of New York, 208; army, diet table. 321; inspection of. 220.
Hydatids of lung, diagnosis and treatment of, 146, 162, 175.
Hydrocephalus, case of, 37.
Hydrops cardii, 295.
Hypertrophy of heart, 211.

I.

Impregnation following rape, 297.
Infantile paralysis, 187 215.
Insanity following injury of the head, 62.
Intestines, encephaloid cancer of, 49.
Iridectomy, is it a new or old operation? 32, 52, 68.
Iron, effects of the preparations of, 87.
Iowa State University, 199.

J.

Jacobi, Dr. A., dentition and its derangements, 1, 15, 29, 43, 57, 71, 85, 99, 113, 127, 141, 155; tracheotomy in croup. 340.
Janes, Dr. E. H., effects of preparations of iron, 87; progress of medical science, 145; aniline. 172.
Jaundice, pathology and treatment of, 146.
Jefferson Medical College, Philadelphia. 205.
Joset, Dr., remedy for hooping cough, 194.

K.

Kidney, remarks on diseases of, 4, 18 30, 100, 115, 128, 142, 183, 213, 227, 241, 255, 270, 282, 298, 311, 323.
Kissingen in peninsula fever, 63
Knee-joint, case of destructive inflammation of, 36.
Krackowizer, Dr. E., tracheotomy in croup, 8.

L.

Ladies' Military Hospital, reports from, 20, 35.
Land scurvy. 125.
Larynx, syphilitic disease of, 327.
Lassing, Dr. H., encysted cervical tumor, 34; electro-magnetism, 54, 232
Laundry, jubilation in the, 248.
Lee, Dr C. A., letters from, 13, 25, 55, 68, 83, 96, 111, 137, 153, 180, 235, 249, 290, 317, 328.
Lente, Dr. F. D., letter from, 331.
Life insurance, value of, 97.
Lint, uses of, 210.
Lithotomy, case of, 59.
Liver, in summer complaint, 160; case of cancer of, 217; new excretory function of the, 245.
Liverpool, health of, 42.
Logwood as a deodorizer, 222
London Hospital for Sick Children, 68.
Long Island College Hospital, 203.
Loomis, Dr., cancer of liver, 218.
Lunatic asylums abroad, 317.
Lunatics, unrestrained, 277.
Lyman, Dr. F R., letter from, 125; death of, 308.
Lyman, Dr. H. M., letters from, 12, 109.
Lyons, hospitals and schools of, 328.

M.

Markoe, Dr. T. M., excision of nerve in neuralgia, 78; lithotrity, 122; cases of refracture. 162.
Maggots in wounds, remedy for, 82.

Malingering, curious case of, 261.
Malignant pustule, review of work on, 40.
Measles, effects of fungi of wheat in production of, 133.
Medical examination of conscripts, 192.
Medical storekeepers, appointment of, 126.
Medical inspector general, appointment of, 11.
Medical, men in courts of law, 27; men as coroners, 79; colleges of Ohio, 204; societies of New York, 208; charities, 330.
Medical and Surgical Society, proceedings of, 64, 78, 92, 121, 147, 162.
Medical Institution of Yale, 198.
Medical School of Maine, 199.
Medical Department, of Lind University, 199; of University of Michigan, 200; of Dartmouth, 201; of West, officers of, 202, 209.
Merritt, Dr. J K, hospital ship Enterpe, 294.
Military, medical school, 9; hospitals, location and appointments of, 23; medical teachers, necessity for, 81; surgery, resections in, 279. 286; hospitals, management of, 291.
Mill Creek Hospital reports, 48, 76.
Mineral waters in peninsula fever, 63; springs, account of, 235; of France, 181, 235.
Missouri Medical College, 201.
Moral insanity, trial of an alleged case of, 233.
Murmurs, endocardial characters of, 225, 239, 267; mitral direct, 230.
Muse, Dr. J. A. B., impending death, successful treatment of cases of, 230.

N.

National Medical College, Washington, 206.
Navy, health in the, 164; regulations for admission and promotion in medical department of, 207, 238.
Neck, bloody tumor of, 218.
Neglected cases, remarks on, 187, 215.
Neuralgia, large doses of morphia in, 349.
New Hampshire State Medical Society, annual meeting of, 28.
New Medical Bureau, 195.
New York, prospect of health reform in, 276.
New York Academy of Medicine, proceedings of, 20, 231, 246, 273, 288, 300, 315.
New York County Medical Society, officers of, 210; proceedings of, 275.
New York Eye Infirmary, report of, 350.
New York Hospital reports, 91, 105, 120, 132. 173.
New York Ophthalmic School, opening of, 252.
New York Pathological Society, proceedings of, 36, 49, 176, 191, 217, 260, 327, 340.
Newbern, wounded at the battle of, 6.
Nightingale, Miss F., health of, 321.
Niles, Dr. Addison, alleged death from chloroform, 311.
Nitrate of silver, uses of, 145.
Noeggerath, Dr. E., pelvic hæmatocele, 289.
Noyes, Dr. H D., extirpation of eye, 36; albuminuria, 323; ophthalmoscope in military inspection, 101; cases at the N. Y. Eye Infirmary, 350.

O.

O'Reilley, Dr. John, iridectomy, 52.
Oakum, as a substitute for lint, 82.
Opdyke, Mayor, on quarantine, 51, 54.
Ophthalmoscope in military inspection, 101.

P.

Paralysis, infantile, 187, 215.
Parigot, Dr. I., the Windham affair, 46; public and private asylums, 119.
Parker, D W., singular case of hernia, 148.
Parturition without pain, 146.
Pelvic hæmatocele, discussion on, 231, 246, 258, 273, 288, 301, 315.
Penis, hæmorrhage from wound of, 122.
Percy, Dr. S. R., croton oil. 169.
Pericarditis, physical signs of. 295.
Pertussis, new remedy for, 194.
Pessary, new intra-uterine, 8.
Peters, Dr. G. A., lithotomy, case of, 148.
Phthisis, climate for, 180.
Pneumonia, treatment of. 190.
Port Royal, quarantine regulations at, 223.
Post, Dr. A. C., fibro-plastic tumor of arm: encephaloid cancer of intestines: gunshot injuries, 49; imperforate anus, 64; lumbar abscess, 64.
Pothouse poison, 238.
Pregnancy, can it follow rape? 297.
Prescription writing. 220.
Prince, Dr. C., removal of clitoris, 340.
Prolapsus uteri. treated by episoraphia, 59.
Psychological medicine, status of, 46.
Public drinking fountains, 179.
Puerperal fever, relations of, to erysipelas, 60, 72, 88, 103.
Pyrmont water in peninsula fever, 63.

R.

Rape, can pregnancy follow in? 297.
Rawson, Dr. C. H, letter from, 42, 125.
Real, Mrs., trial of, 233.
Rectal abscess, case of. 175.
Rectum, stricture of, case, 78.
Recruits, medical inspection of, 123.
Refracture, case of, 163.
Resections in military surgery, 272, 286.
Reynolds, Dr. F., letter from, 82.
Rogers, Dr. S., review of work by, 81.
Rubeola, effects of fungi of wheat in the production of, 133.
Rush Medical College, 198.

S.

Sabbath, rest on the, 304.
Salisbury, Dr. J. H., fungi of wheat in measles, 133.
Sanborn, Dr. E. K., death of, 98.
Sands, Dr. H. B. wound of penis, 122; fibro-plastic tumor of neck, 218; epithelial cancer, 218.
Sanitary Commission. hospital directory of, 321.
Savage Station Hospital, report from, 151 167.
Sayre, Dr L. A., oakum for lint, 82; cancer of bone, 260; cyst of bladder, 191.
Scarlet fever, remarks on, 74, 90; new symptom of, 190.
Searle, Dr. A., scarlet fever, 74, 90.
Second assistant surgeons, act for providing for, 252.
Sewerage in London, 137.
Shoulder, amputation of, 91, 105, 132.
Sichel, M, on extirpation of diseased eyes, 108.
Sims, Dr. J. M., amputation of cervix uteri, 20.
Skull, compound fracture of, 64.
Small pox amongst sheep, 136.
Smith, Dr. J. L., hydrocephalus, 37; cholera infantum, 160.
Societies, medical, of N. Y, 208.
Society for relief of widows and orphans of medical men, annual meeting of, 331.
St. Louis Medical College, 200.
Starling Medical College, 204.
Stercorine, formation of in faeces, 245.
Stewart, Dr. P., compressed sponge, 326.
Students, address to, 197.
Studley, Dr. W. H., gangrene of throat, 315.
Styptic, a portable, 50.
Subclavian artery, wound of, 348.
Surgeon, and patient, contract between, 50; duties of, in the field, 335.
Surgeon-General, report of, 341.
Surgeons, want of qualified, in the army, 292.
Surgical Section, proceedings of, 8.
Swinburne, Dr. J., report of, 138, 151, 167.
Synovial bursa, enucleation of 49.
Syphilis, primary treatment of, in our dispensaries, 219.

T.

Taylor, Dr. C. F., neglected cases, 187, 215.
Teeth at birth, infants with, 249.
Teething, derangements attending, 1, 15, 29, 43, 57, 71, 85, 99, 113, 127, 141, 155.

Tennessee, medical department of, 280.
Thomas, Dr. T. G., version as a substitute for craniotomy, 92.
Thompson, Dr. J. H., wounded at Battle of Newbern, 6.
Thomson, Dr. W. H., distinctions between virus and poison, 130, 159, 170.
Throat, gangrene of the, 243.
Thyme, medical properties of, 194.
Tobacco, new use for, 179, 248; some of the effects of, 189.
Townsend, Dr. T. B., neuralgia, 349.
Tracheotomy in croup, 8, 340.
Transactions of Medical Society of the State of New York, review of, 136.
Tripler, Dr. C. J., retirement of, 69.
Tumor of neck, 218; of side, 218.

U.

Underhill, Dr. A., inaugural address of, 275.
Unguentum sambuci for maggots in wounds, 83.
University of Buffalo, medical department, 203; of Maryland, 199; of New York, medical department, 202; of the Pacific, medical department of, 198: of Vermont, medical department of, 205; of Pennsylvania, medical department of, 205.
Uræmia, case of death from, 311.
U. S. General Hospitals, directory for, 194.
Uterus, amputation of neck of, 3, 16, 20; case of rupture of, 64; cancer of in young patient, 123.

V.

Vaccination, protection by, 66.
Varicocele, treated by ligature, 105.
Variola, pyarthrosis following, 328.
Vermont Medical Society, semi-annual meeting of, 12; annual meeting of, 12.
Version as a substitute for craniotomy, 92.
Virus and poison, distinctions between, 130, 159, 170.
Volunteer surgical aid, 150, 166.

W.

War, fatality of implements of, 25; surgery of the, 47; effects of the, on medical profession, 177.
Watson, Dr. P. H., exomphalos, radical cure of, 217.
Westlake, Dr. H. G., letter from, 222.
Whiskey in chorea, 64.
White, Dr. J. P., pelvic hæmatocele, 288.
White, Dr. W. J. H., death of, 208, 221.
Willard, Dr. S. D., review of work by, 11.
Wounds, remedy for maggots in, 83; incised, of wrist, 74; general remarks on, 347.

COLUMBIA UNIVERSITY LIBRARIES

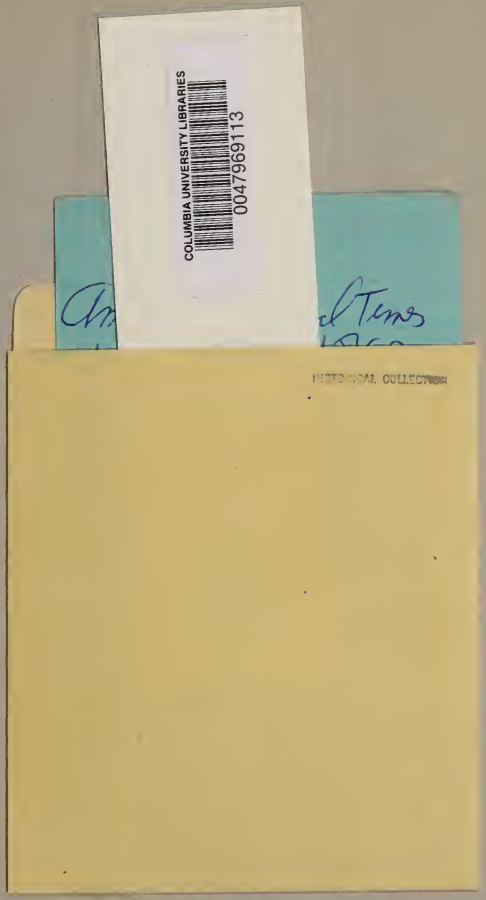
This book is due on the date indicated below, or at the expiration of a definite period after the date of borrowing, as provided by the rules of the Library, or by special arrangement with the Librarian in charge.

Annex

SEP 19 1964

DATE BORROWED	DATE DUE	DATE BORROWED	DATE DUE

C28(1141)M100


COLUMBIA UNIVERSITY LIBRARIES
0047969113
HISTORICAL COLLECTION